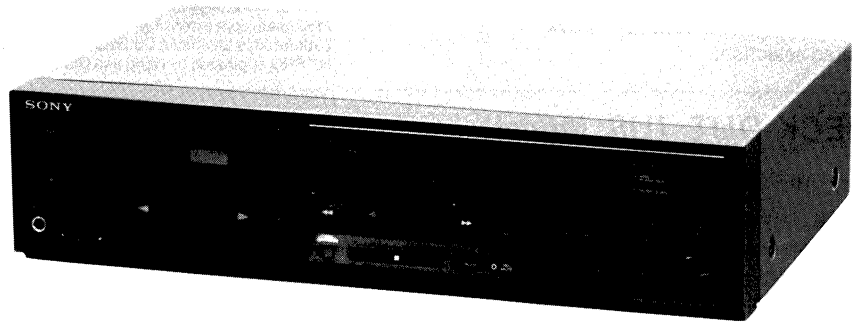
TC-R502/R502ES

SERVICE MANUAL

TC-R502:
US Model
Canadian Model

TC-R502ES:
AEP Model
UK Model
E Model



SPECIFICATIONS

Recording system 4-track 2-channel stereo
Fast-forward and rewind time
Approx. 90 sec. (with C-60 cassette)
Bias frequency 105 kHz
Signal-to-noise ratio
(NAB, at peak level)

Dolby NR switch / Cassette	OFF	B-TYPE ON	C-TYPE ON
TYPE IV (Sony METAL-ES)	59 dB	66 dB	72 dB
TYPE II (Sony UCX-S)	58 dB	65 dB	71 dB
TYPE I (Sony HF-S)	54 dB	61 dB	67 dB

Total harmonic distortion
1.0% (with Sony METAL-ES cassettes)
Frequency response
DOLBY NR OFF
• With TYPE IV cassette (Sony METAL-ES)
30 – 17,000 Hz (±3 dB)
30 – 13,000 Hz (±3 dB, 0 VU recording)
• With TYPE II cassette (Sony UCX-S)
30 – 17,000 Hz (±3 dB)
• With TYPE I cassette (Sony HF-S)
30 – 15,000 Hz (±3 dB)
Wow and flutter 0.05% WRMS (NAB)
Inputs Line inputs (phono jacks)
Sensitivity 77.5 mV (–20 dB)
Input impedance 50 k ohms
Outputs Line outputs (phono jacks)
Rated output level 0.44 V (–5 dB) at load impedance 47 k ohms
Load impedance over 10 k ohms
Headphone output (stereo phone jack)
Output level variable from –20 dB to –∞ dB
at load impedance of 8 ohms

General
Power requirements
US, Canadian model: 120 V ac, 60 Hz
AEP model: 220 V ac, 50/60 Hz
UK model: 240 V ac, 50/60 Hz
E model: 120, 220, 240 V ac adjustable, 50/60 Hz
Power consumption
20 watts
Dimensions Approx. 430 × 105 × 285 mm (w/h/d)
(17 × 4¼ × 11¼ inches)
including projecting parts and controls
Weight Approx. 4.7 kg (10 lbs 6 oz)
Supplied accessories
Connecting cord (2)
Remote control cord (1; 4-pin)

Design and specifications subject to change without notice.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

STEREO CASSETTE DECK

SONY®

TC

MICROFILM

FEATURES

- The Dolby HX PRO* system improves the linearity of the tape's high range response during recording.
- The record/playback head is made of a laser amorphous magnetic alloy using LC-OFC winding.
- The roto-bilateral head assures the same performance characteristics in either tape transport direction.
- For optimum performance in the Dolby NR system, the recording level can be calibrated to the sensitivity of each tape played back.
- Quick reverse function prevents tape transport on the leader tape.
- The AMS, blank skip and music scan functions allow easy access to a desired selection.
- Timer-activated play/recording is possible using the optional timer.
- The optional remote control unit enables various operations to be remotely controlled.
- The digital linear counter indicates the recording or playback time which has elapsed on the tape.
- Bright FL-display peak program meters indicate the transient peaks.
- B and C type Dolby NR system reduces noise.

* "Dolby", the double-D symbol and HX PRO are trade marks of the Dolby Laboratories Licensing Corporation. Noise reduction and HX PRO headroom extension manufactured under license from Dolby Laboratories Licensing Corporation.
HX PRO originated by Bang and Olufsen.

SAFETY CHECK-OUT (US Model)

After correcting the original service problem, perform the following safety check before releasing the set to the customer:
Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)

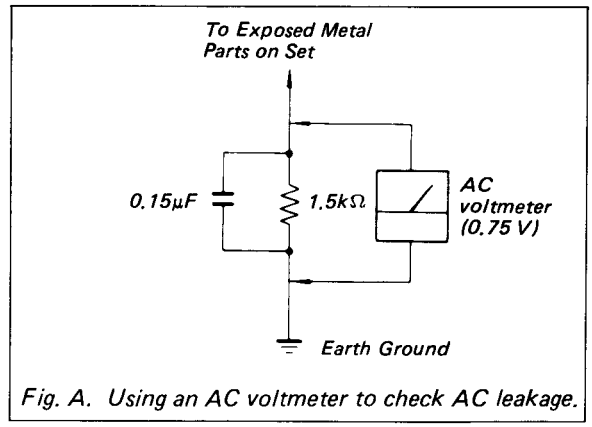


Fig. A. Using an AC voltmeter to check AC leakage.

MODEL IDENTIFICATION

– Specification Label –

US, Canadian model

SONY MODEL NO. TC-R502
STEREO CASSETTE DECK
AC: 120V 60Hz 20W
SERIAL NO.
MADE IN JAPAN

AEP model

SONY MODEL NO. TC-R502ES
STEREO CASSETTE DECK
AC: 220V ~ 50/60Hz 20W
SERIAL NO.
MADE IN JAPAN

UK model

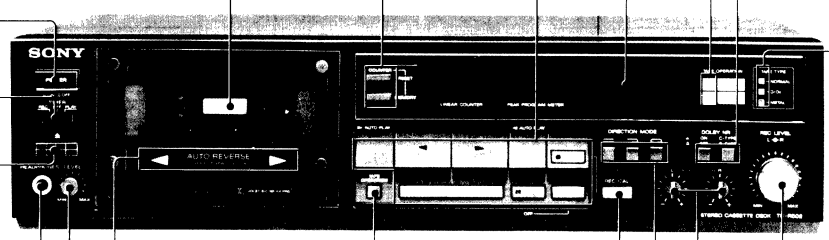
SONY MODEL NO. TC-R502ES
STEREO CASSETTE DECK
AC: 240V ~ 50/60Hz 20W
SERIAL NO.
MADE IN JAPAN

E model

SONY MODEL NO. TC-R502ES
STEREO CASSETTE DECK
AC: 120, 220, 240 ~ 50/60Hz 20W
SERIAL NO.
MADE IN JAPAN

FUNCTION OF CONTROLS

Front panel



Tape operation buttons and indicators
◀◀ (fast reverse) button
◀ (reverse play) button and indicator
▶ (forward play) button and indicator
▶▶ (fast forward) button
● REC (record) button and indicator
■ STOP button
❚❚ PAUSE button and indicator
○ REC MUTE (record muting) button

Display wind

TAPE OPER
Shows the t
OPERATION

DOLBY NR s
Press to rec
Reduction) s

Dolby NR system
Dolby B
Dolby C
Dolby OFF

TAPE TYPE

COUNTER RESET and MEMORY buttons
Press the MEMORY button to return to the desired portion during recording and playback.
Press the RESET button to reset the counter to 0.00

Cassette holder

POWER switch

TIMER switch

⏏ (eject) button

HEADPHONES jack

TAPE OPERATION button

HEADPHONES LEVEL control

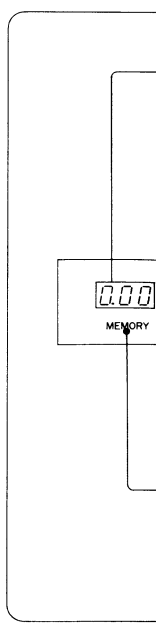
REC CAL (recording calibration) button
Press to calibrate the recording level to match a tape's sensitivity.

Direction indicators (◁ REV, ▷ FWD)
Lights up to show which side of the cassette is being played back or recorded on.

DIRECTION MODE buttons

REC CAL controls
Adjust the recording level according to a tape's sensitivity.

REC LEVEL (recording level) controls
Adjust the recording level by observing the PEAK PROGRAM METERs.



w

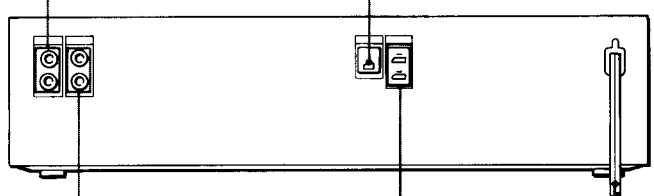
TION indicator
e operation selected with the TAPE
utton.

itches
l or play back using the Dolby NR (Noise
tem.

Switch setting	
Left switch	Right switch
⏍ ON	⊓ B-TYPE
⏍ ON	⏍ C-TYPE
⊓ OFF	Either position

licator

Rear panel



LINE IN (line input) jacks (phono jack)
Accept tape outputs from an amplifier for tape recording and line outputs from another cassette deck when dubbing a tape from that unit.

SYNCHRO connector
For synchronized recording, connect to the synchro connector of the turntable system.

LINE OUT (line output) jacks (phono jack)
Accept tape inputs from an amplifier for playing back a tape and line inputs from another cassette deck for dubbing a tape onto that unit.

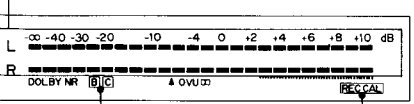
AC power cord

CONTROL S connectors (4-pin)
IN: Connect to the optional wireless remote commander RM-88 or the CONTROL S OUT connector of another piece of Sony equipment.
OUT: Connect to the CONTROL S IN connector of another piece of Sony equipment.

Display window

LINEAR COUNTER
Indicates the approximate tape running time.

PEAK PROGRAM METERS
Show the peak input level for each channel during recording, and the recorded level during playback.

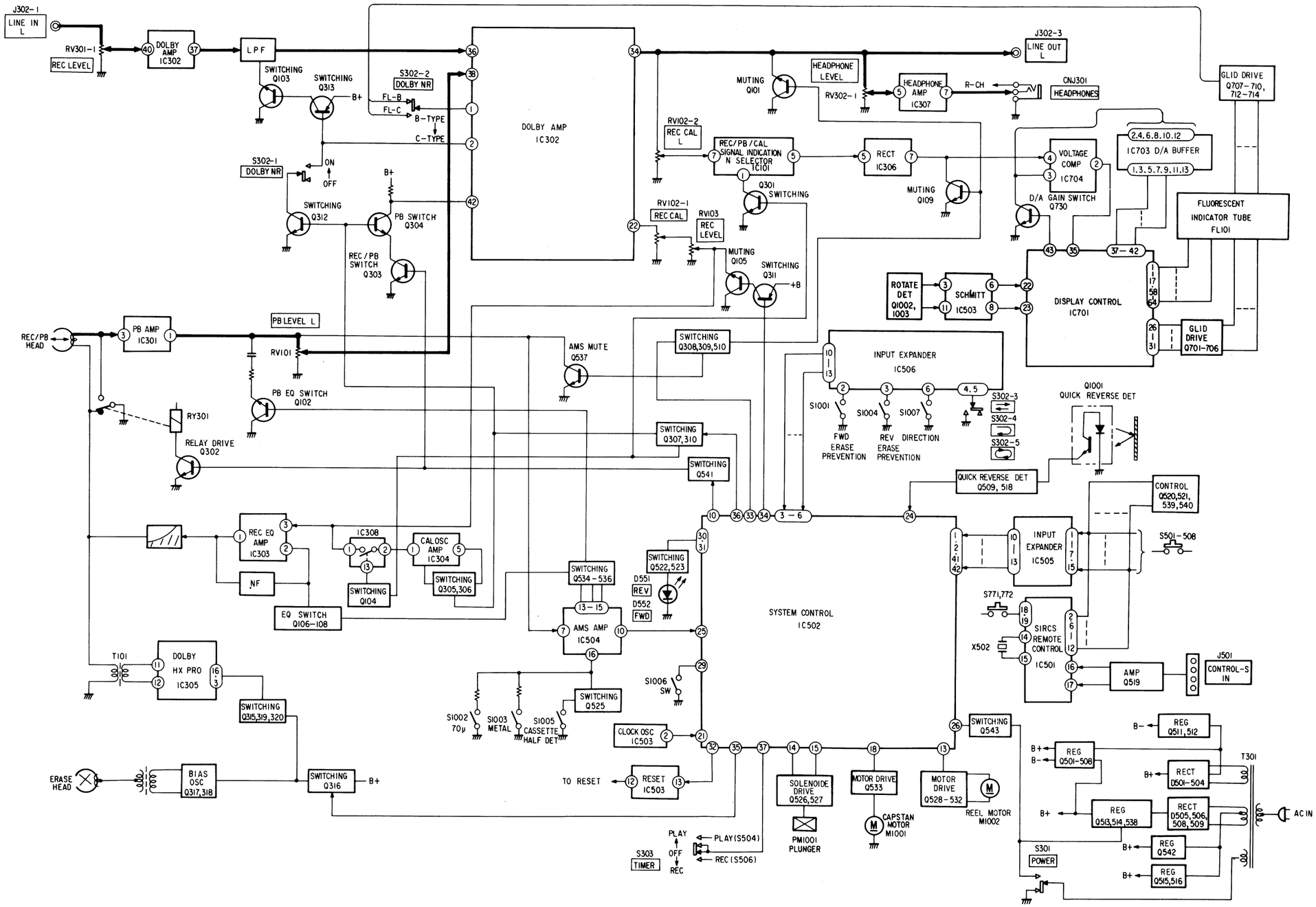


DOLBY NR indicator
Lights up to show the selected Dolby NR type: B or C.

MEMORY indicator
Lights up when the MEMORY button is pressed.

REC CAL indicator
Lights up during the recording calibration.

SECTION 1
BLOCK DIAGRAM



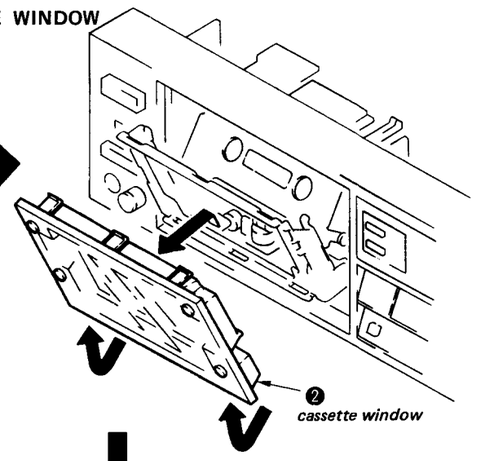
SECTION 2
DISASSEMBLY

• Follow the disassembly procedure in the numerical order given.

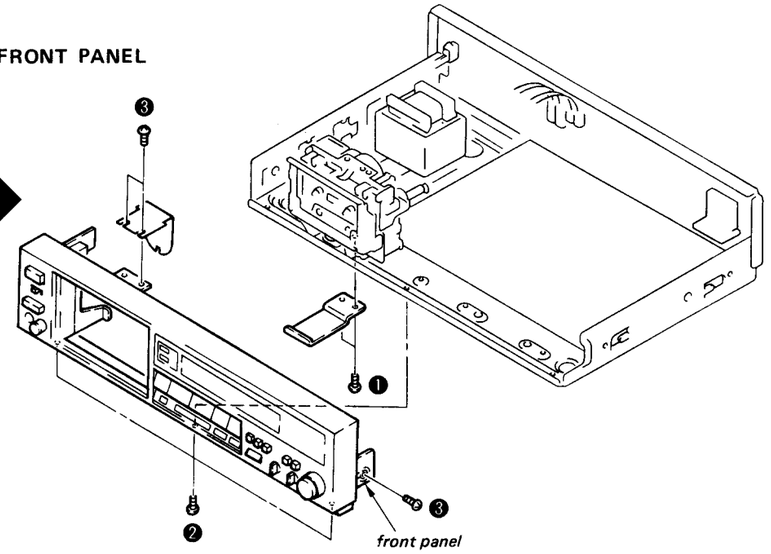
CASE

Remove four case screws.

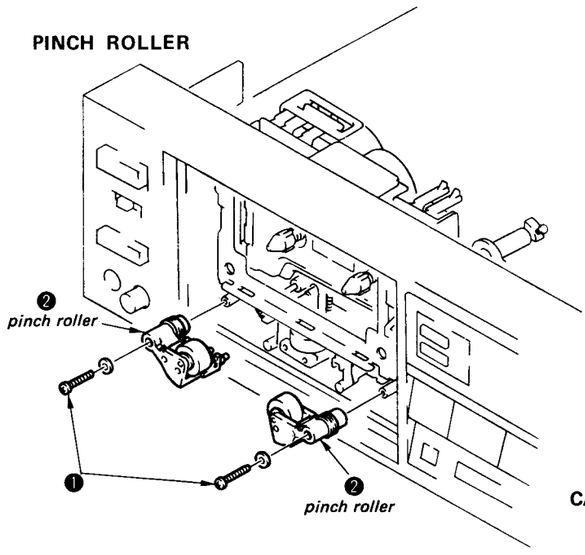
CASSETTE WINDOW



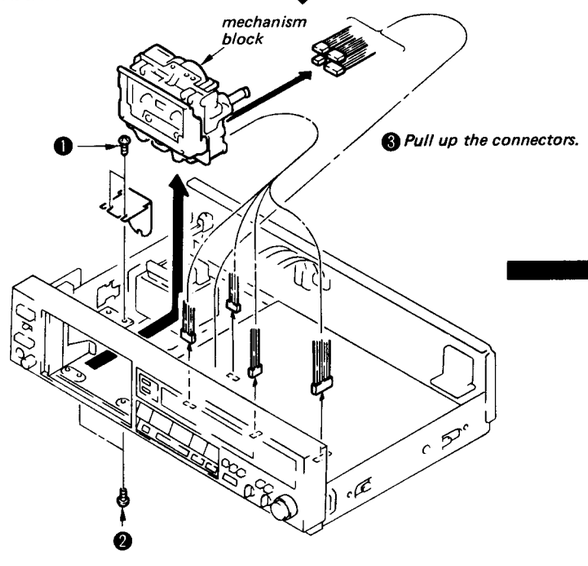
FRONT PANEL



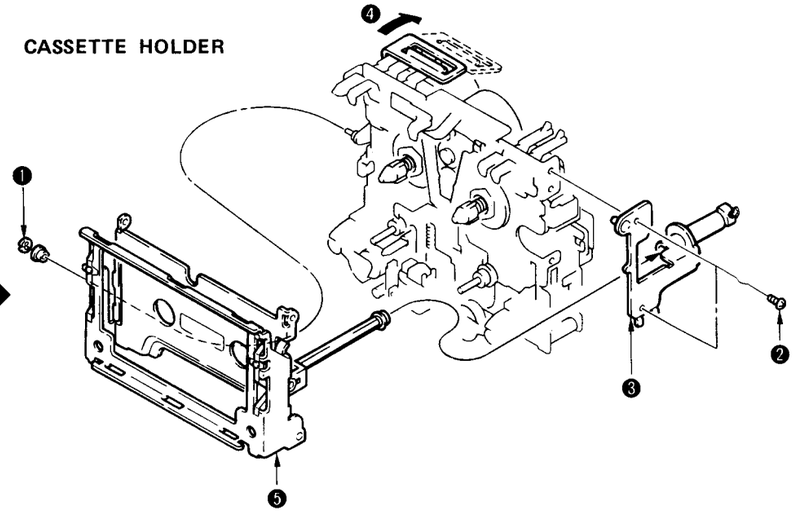
PINCH ROLLER



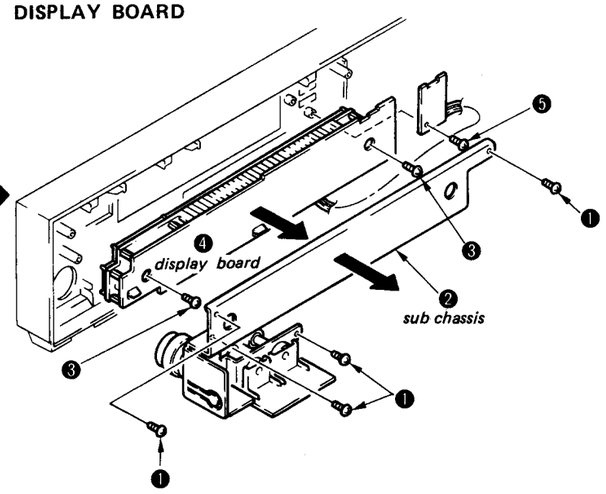
MECHANISM BLOCK



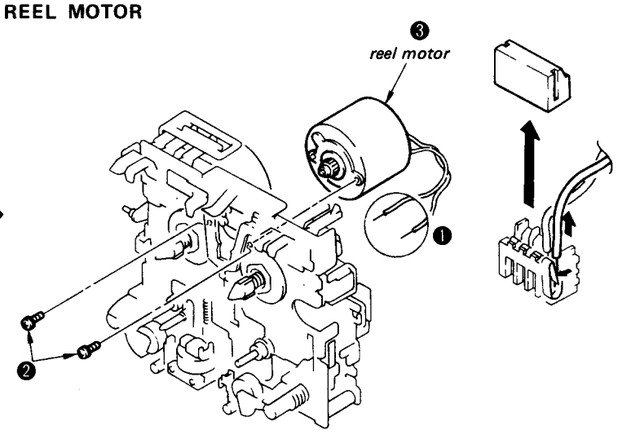
CASSETTE HOLDER



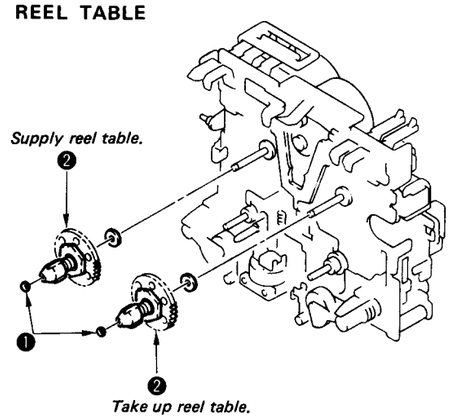
DISPLAY BOARD



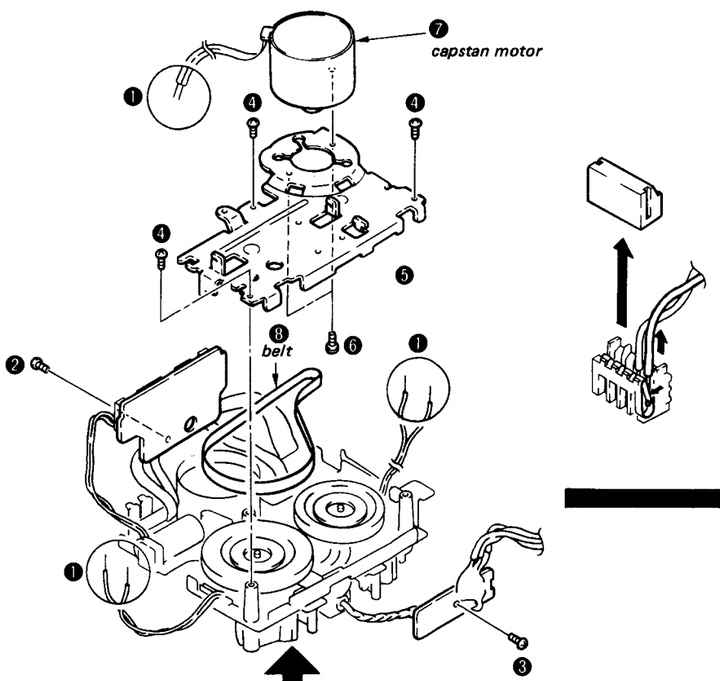
REEL MOTOR



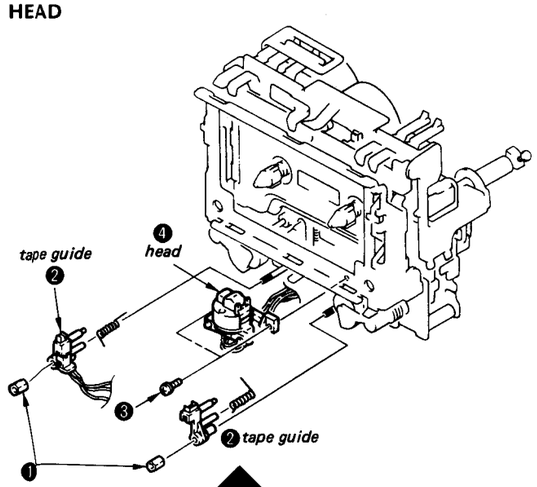
REEL TABLE



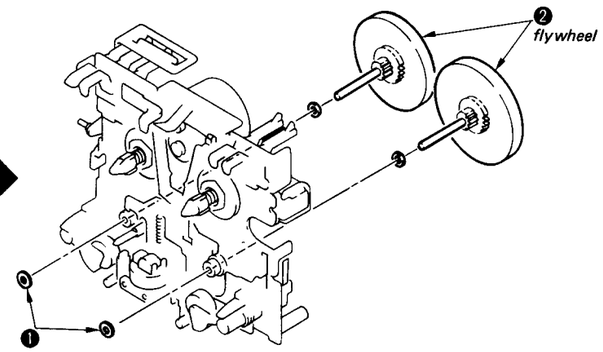
CAPSTAN MOTOR, BELT



HEAD



FLYWHEEL



SECTION 3
ADJUSTMENTS

3-1. MECHANICAL ADJUSTMENTS

PRECAUTION

1. Clean the following parts with a denatured-alcohol-moistened swab:

record/playback head	pinch roller
erase head	rubber belts
capstan	idler

2. Demagnetize the record/playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

Torque mesurement

Torque	Torque meter	Meter reading
FWD Torque	CQ102C	30 – 70 g•cm (0.42 – 0.97 oz•inch)
REV Torque	CQ102RC	30 – 70 g•cm (0.42 – 0.97 oz•inch)
FF•REW Torque	CQ201B	90 – 160 g•cm (1.3 – 2.2 oz•inch)

3-2. ELECTRICAL ADJUSTMENTS

1. The adjustments in the following sections are to be performed with the mechanism deck in the set.
2. The adjustment should be performed in the order given in this service manual.
3. The adjustments should be performed for both L-CH and R-CH.

- Set the TAPE select switches according to the tape as follows.

Tape	Tape type indicator
CS-17	TYPE I
CS-26	TYPE II
CS-42	TYPE IV

- Switch position
  DOLBY NR . . . . . OFF
  TIMER . . . . . OFF
  REC CAL . . . . . CENTER (center click)
- Standard Record:
  Deliver the standard input signal level to the input jack and set the REC LEVEL control to obtain the standard output signal level.

Standard Input Level

	LINE IN
source impedance	10kΩ
input level	0.25V (-10dB)

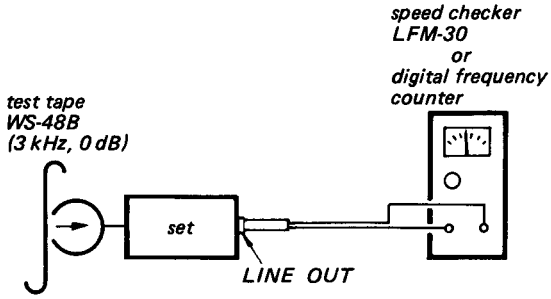
Standard output Level

	LINE OUT
load impedance	47kΩ
output level	0.44V (-5dB)

Tape Speed Adjustment

Procedure:

Mode: FWD playback



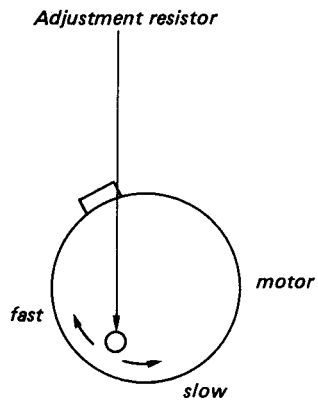
Specification:

Speed checker	Digital frequency counter
-1 – +1%	2,970 – 3,030 Hz

Frequency difference between the beginning and the end of the tape should be within 0.84% (25Hz).

Adjustment Location:

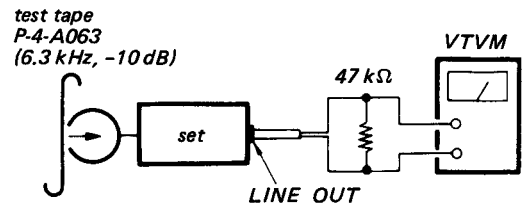
Adjust by using a screwdriver when turning in the direction of clockwise, speed will be fast.



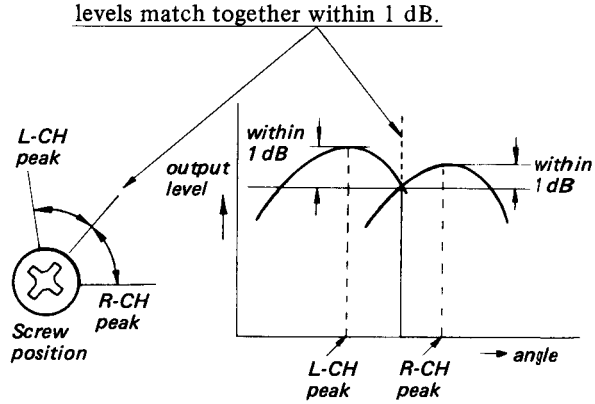
Record/Playback Head Azimuth Adjustment

Procedure: Adjust both NOR and REV.

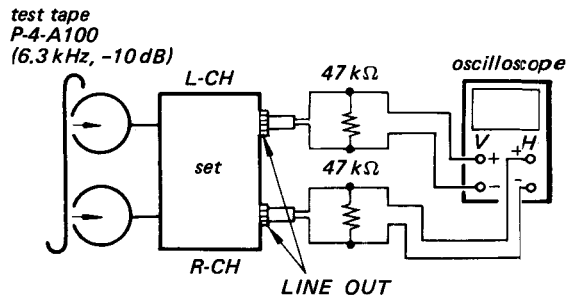
1. Mode: playback

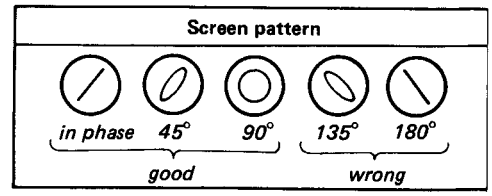


2. Turn the adjustment screw for the maximum output levels. If these levels do not match, turn the adjustment screw until both of output levels match together within 1 dB.



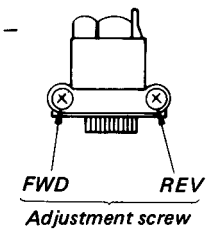
3. Phase Check
Mode: playback





Adjustment Location:

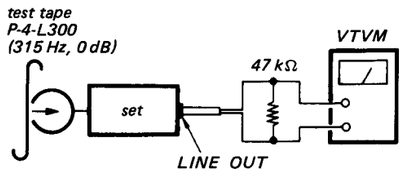
– Record/Playback head –



Playback Level adjustment

Procedure:

1. Mode: playback

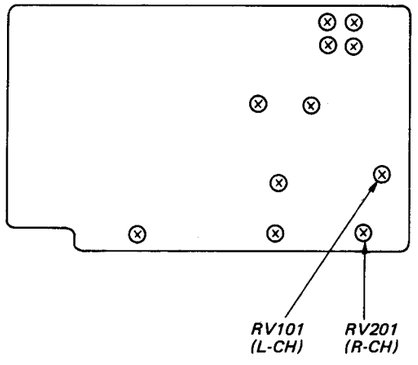


2. Adjust RV101 (L-CH) and RV201 (R-CH) to obtain the specified LINE OUT level.

Specification: LINE OUT level: 0.41 – 0.46 V
(–5.5 to –4.5 dB)
Level difference between channels: less than 0.5 dB

Confirm that the LINE OUT level is not changed when repeating playback and stop modes.

Adjustment Location: AUDIO board



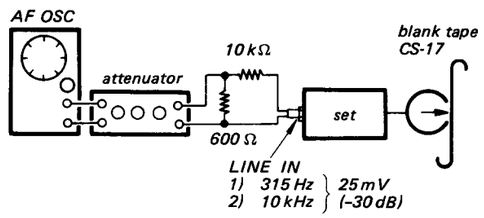
Record Bias Adjustment

Setting:

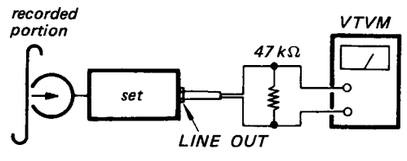
REC LEVEL control: standard record
(See page 11.)

Procedure:

1. Mode: record

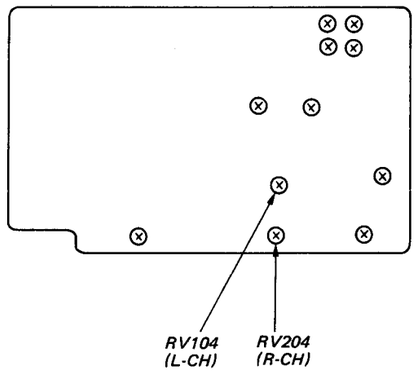


2. Mode: playback



3. Adjust RV104 (L-CH), RV204 (R-CH) so that the LINE OUT level of 10 kHz signal is 0 ± 0.5 dB relative to that of 315 Hz.

Adjustment Location: AUDIO board



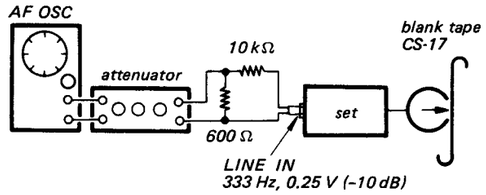
Record Level Adjustment

Setting:

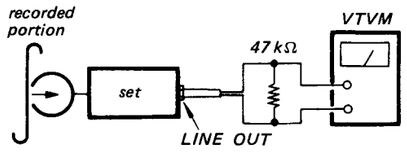
REC LEVEL control: standard record
(See page 11.)

Procedure:

1. Mode: record



2. Mode: playback

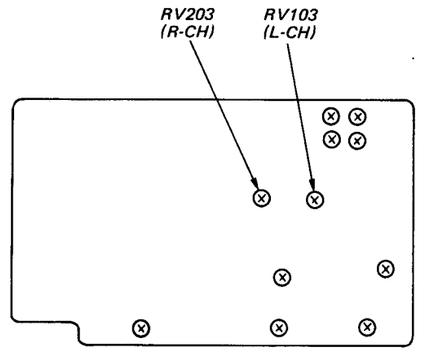


3. Adjust RV103 (L-CH) and RV203 (R-CH) to obtain the specified LINE OUT level.

Specification:

LINE OUT level: 0.41 – 0.46 V
(–5.5 to –4.5 dB)

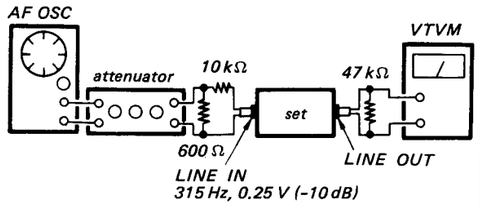
Adjustment Location: AUDIO board



Meter Level adjustment

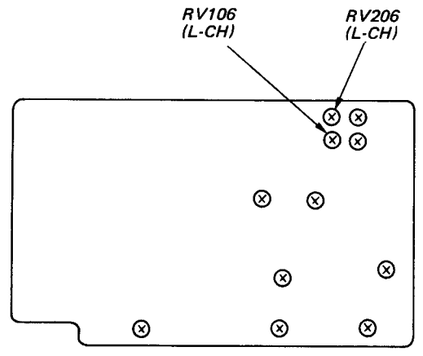
Procedure:

1. Mode: record



2. Adjust the REC LEVEL (RV301) for –5 dB LINE OUT level.
3. Adjust RV106 (L-CH) and RV206 (R-CH) for the point where meter 0 VU (–4 dB) section segments lights up.
4. Confirm that all the meter segments light up when LINE OUT level is +9 dB.

Adjustment Location: AUDIO board



CAL Oscill

Conditions

- REC CA
- Ground
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CAL mo

1. Inser
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2. After
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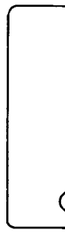


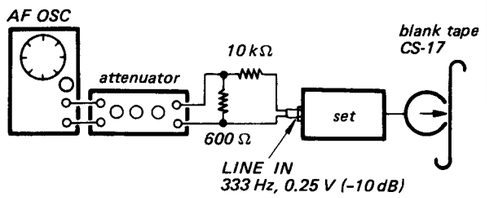
Record Level Adjustment

Setting:

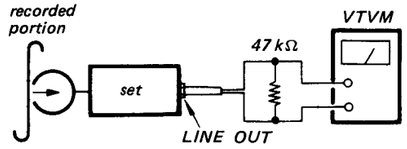
REC LEVEL control: standard record
(See page 11.)

Procedure:

1. Mode: record



2. Mode: playback

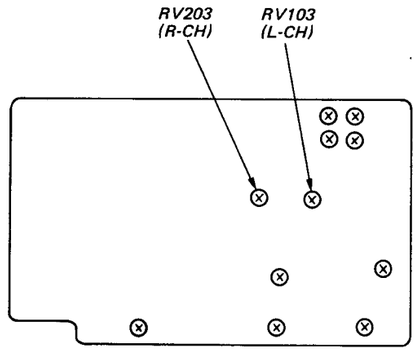


3. Adjust RV103 (L-CH) and RV203 (R-CH) to obtain the specified LINE OUT level.

Specification:

LINE OUT level: 0.41 – 0.46 V
(–5.5 to –4.5 dB)

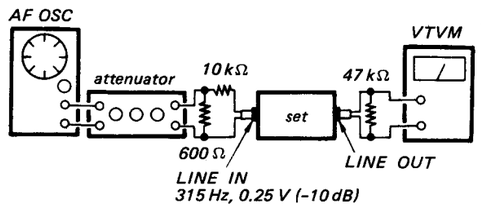
Adjustment Location: AUDIO board



Meter Level adjustment

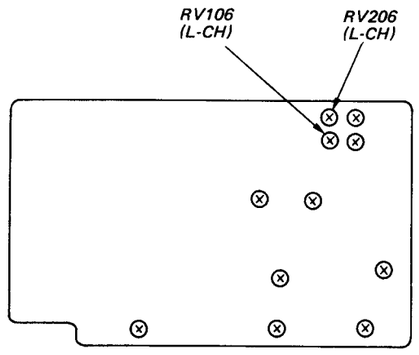
Procedure:

1. Mode: record



2. Adjust the REC LEVEL (RV301) for –5 dB LINE OUT level.
3. Adjust RV106 (L-CH) and RV206 (R-CH) for the point where meter 0 VU (–4 dB) section segments lights up.
4. Confirm that all the meter segments light up when LINE OUT level is +9 dB.

Adjustment Location: AUDIO board

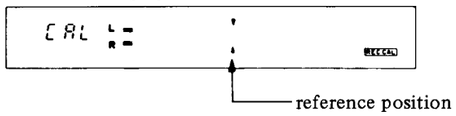


CAL Oscillation Level/CAL Meter Level Adjustment

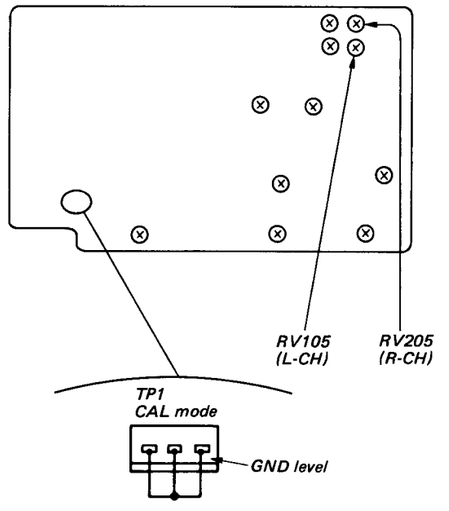
Conditions:

- REC CAL knob: center (center click)
- Ground system control board TP-1 (CAL mode) as shown in the figure. (Display tube displays CAL, and CAL oscillation state begins.)

CAL mode display



1. Insert CS-15, perform recording operation for about 10 seconds, then rewind the tape and play it back. Adjust RV105 (L-CH) and RV205 (R-CH) so that the segment one above the reference position lights up at this time.
2. After adjustment, remove the connection to system control board TP-3 (CAL mode).



Quick Reverse Sensitivity Adjustment

Conditions:

Direction mode switch: ⇄

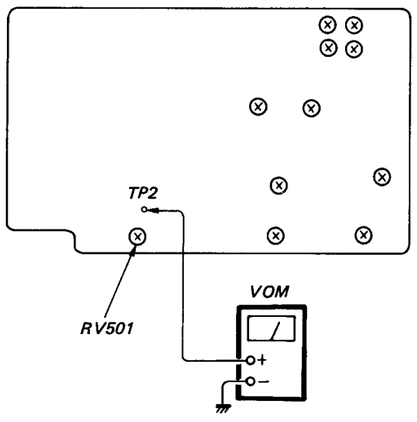
Adjustment Method:

1. Connect a DC voltmeter to system control board TP2.
2. Insert an empty cassette and put into FWD state.
3. Adjust RV501 for 10 V reading on the DC voltmeter.

Specification: 10 V ±0.5 V

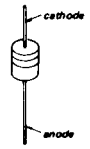
4. Repeat FWD, STOP two or three times and check the voltage again.
5. Confirm that the tape reverses at joint portion of leader tape and magnetic tape.

Adjustment Location: AUDIO board

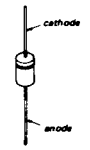


- Semiconductor Lead Layouts

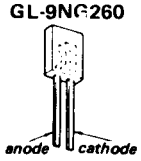
1SS202-1



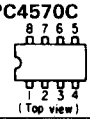
HZS6A1L
HZS7B2L
HZS9B3L
HZS9C1L
HZS12C1L



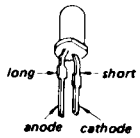
GL-9NG260



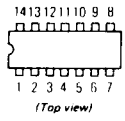
HD614042SA87
M5220P
μPC4570C



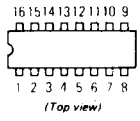
GL-3PR7
GL-3HY7
SEL2410E
TLG124A



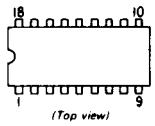
TC4069UBP
μPD4066C



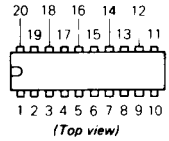
CX10034
TC4019BP



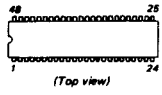
μPC1297CA



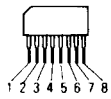
M50761-3079



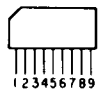
LC6520C-3079



M5201L
M5218L



NJM2903S



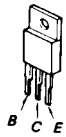
2SK246-GR2

2SA1409-L
2SB1013
2SC2001
2SC3622A-L
2SD1387

2SB647

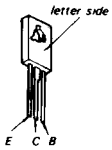
2SB808
2SC2603F
DTA114ES
DTA124ES
DTC114ES
DTC144ES
DTC143TS

2SD1585-L



2SD774

2SB731
2SD809



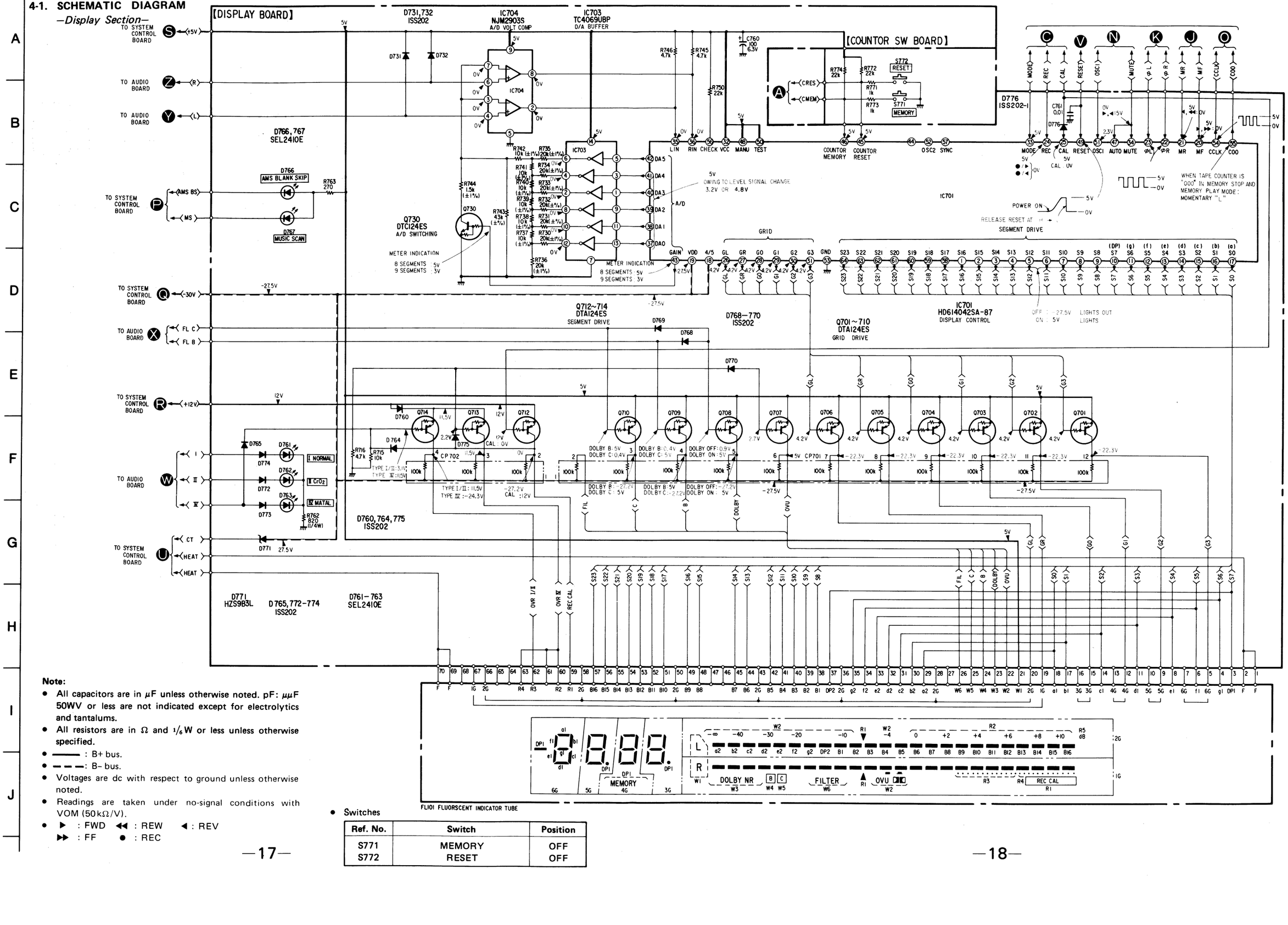
2SA1175

- Semiconductor Location

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No	Location	Ref. No.	Location
D101	B-9	D521	B-19	D768	D-24	Q103	F-11	Q317	G-15	Q530	F-19
D201	A-9	D522	D-20	D769	D-24	Q104	D-12	Q318	G-15	Q531	F-19
D301	I-11	D523	C-16	D770	D-24	Q105	E-12	Q319	G-14	Q532	F-19
D302	D-17	D524	C-16	D771	C-31	Q106	F-11	Q320	G-14	Q533	E-19
D303	I-14	D525	E-17	D772	C-23	Q107	F-11	Q501	A-13	Q534	H-16
D305	E-15	D526	E-16	D773	C-23	Q108	E-11	Q502	B-13	Q535	H-16
D306	F-15	D527	E-15	D774	C-23	Q109	B-8	Q503	A-12	Q536	H-16
D307	F-11	D528	E-16	D775	D-24	Q201	C-9	Q504	B-13	Q537	G-17
D308	G-11	D530	C-16	D776	C-25	Q202	H-9	Q505	B-12	Q538	C-15
D310	G-16	D531	D-18	Q203	F-8	Q506	C-13	Q539	D-17	Q540	E-17
D311	F-16	D532	G-17	IC101	B-10	Q204	D-13	Q507	C-13	Q541	E-17
D312	F-28	D533	F-15	IC201	B-10	Q205	E-13	Q508	B-13	Q542	B-19
D501	B-14	D534	B-19	IC301	H-10	Q206	G-14	Q509	H-16	Q543	B-19
D502	B-14	D548	E-19	IC302	E-10	Q207	F-14	Q510	F-16	Q701	C-32
D503	B-14	D549	E-20	IC303	F-13	Q208	E-14	Q511	A-18	Q702	C-32
D504	B-14	D550	B-20	IC304	D-15	Q209	B-8	Q512	A-18	Q703	D-32
D505	B-15	D551	I-7	IC305	H-12	Q301	C-11	Q513	B-24	Q704	D-32
D506	B-15	D552	I-5	IC306	D-9	Q302	H-11	Q514	C-16	Q705	D-32
D507	B-16	D553	H-28	IC307	C-6	Q303	F-10	Q515	B-19	Q706	D-31
D508	A-15	D554	H-28	IC308	D-12	Q304	F-10	Q516	B-19	Q707	D-31
D509	B-15	D555	H-30	IC501	D-16	Q305	D-15	Q518	H-17	Q708	D-31
D510	B-12	D556	H-29	IC502	F-18	Q306	D-14	Q519	E-16	Q709	D-30
D511	C-18	D731	D-24	IC503	G-19	Q307	D-13	Q520	E-17	Q710	D-30
D512	F-17	D732	D-24	IC504	G-16	Q308	F-16	Q521	F-16	Q712	C-24
D513	C-9	D760	C-24	IC505	C-19	Q309	F-16	Q522	F-17	Q713	C-24
D514	C-16	D761	D-23	IC506	E-19	Q310	F-15	Q523	F-17	Q714	C-23
D515	B-16	D762	D-23	IC701	D-28	Q311	F-15	Q525	D-20	Q730	D-24
D516	B-16	D763	D-23	IC703	D-25	Q312	G-11	Q526	E-19	Q1001	I-20
D517	B-16	D764	D-24	IC704	D-24	Q313	G-11	Q527	E-19	Q1003	A-3
D518	B-18	D765	C-23	Q31ɔ	H-14	Q528	F-19	Q1002	D-3		
D519	B-16	D766	D-24	Q101	C-11	Q316	G-13	Q529	F-19		
D520	C-16	D767	D-24	Q102	G-9						

4-1. SCHEMATIC DIAGRAM

—Display Section—



Note:

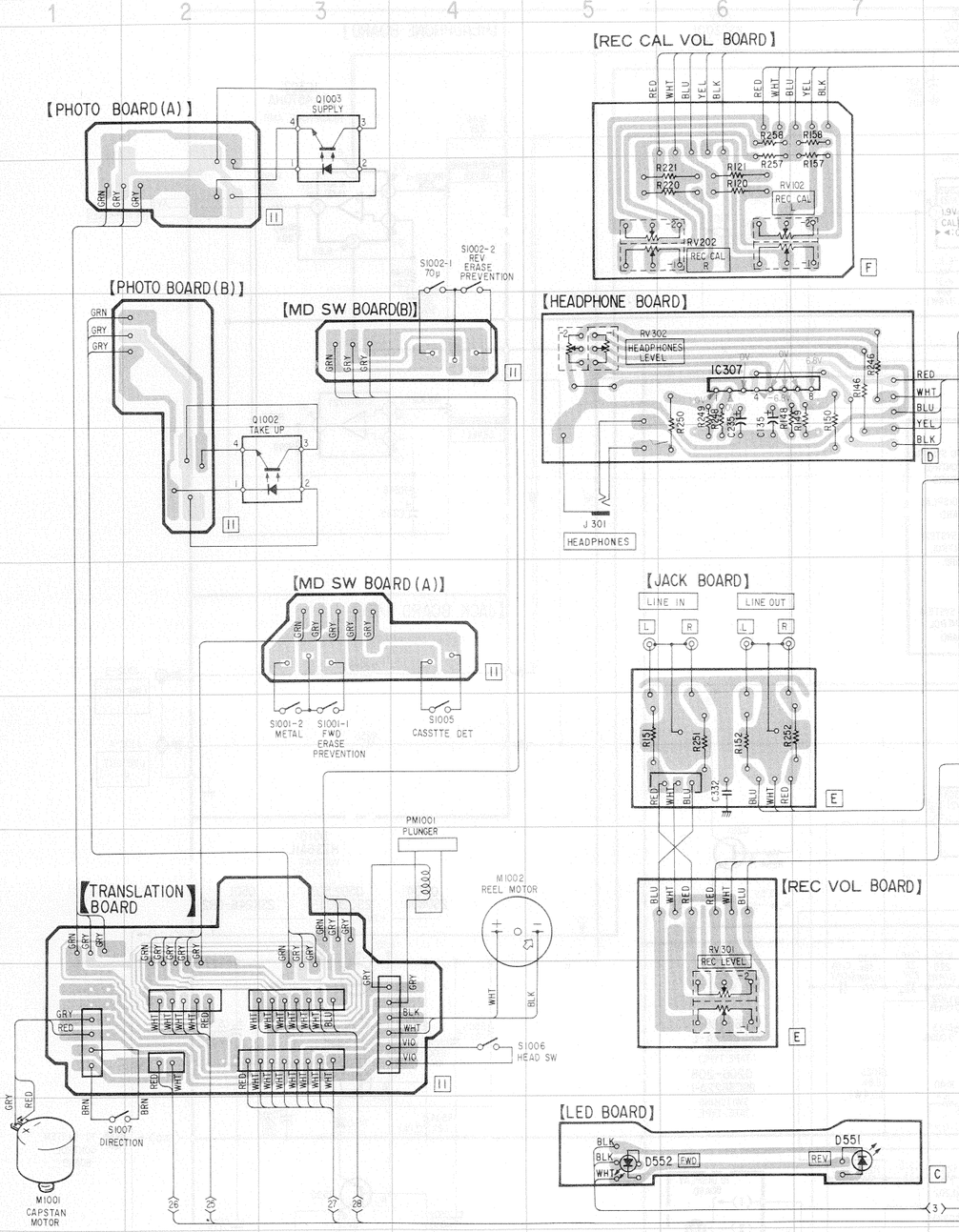
- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/6W or less unless otherwise specified.
- ——— : B+ bus.
- — — —: B- bus.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken under no-signal conditions with VOM (50kΩ/V).
- ▶ : FWD ◀◀ : REW ◀ : REV
  ▶▶ : FF ● : REC

- Switches

Ref. No.	Switch	Position
S771	MEMORY	OFF
S772	RESET	OFF

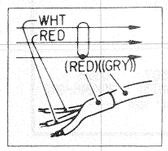
4-2. MOUNTING DIAGRAM

● See page 16 for semiconductor lead layouts and semiconductor location.



Note:

- Color code of sleeving over the end of the jacket.



- ○— : parts extracted from the component side.
- ●— : parts extracted from the conductor side.
- : B+ pattern
- : B− pattern

【TIMER SW BOARD】

【POWER SW BOARD】

【TRANSISTER BOARD】

FLI01 FLUORESCENT INDICATOR TUBE

【DISPLAY BOARD】

【TRANSLATION BOARD】

【DIRECTION SW BOARD】

【COUNTER SW BOARD】

【CONTROL SW BOARD】

T301 POWER TRANSFORMER — US Canadian MODEL

T301 POWER TRANSFORMER — AEP UK MODEL

T301 POWER TRANSFORMER — E MODEL — VOLTAGE SELECTOR

4-3. SCHEMATIC DIAGRAM

–Audio Section–

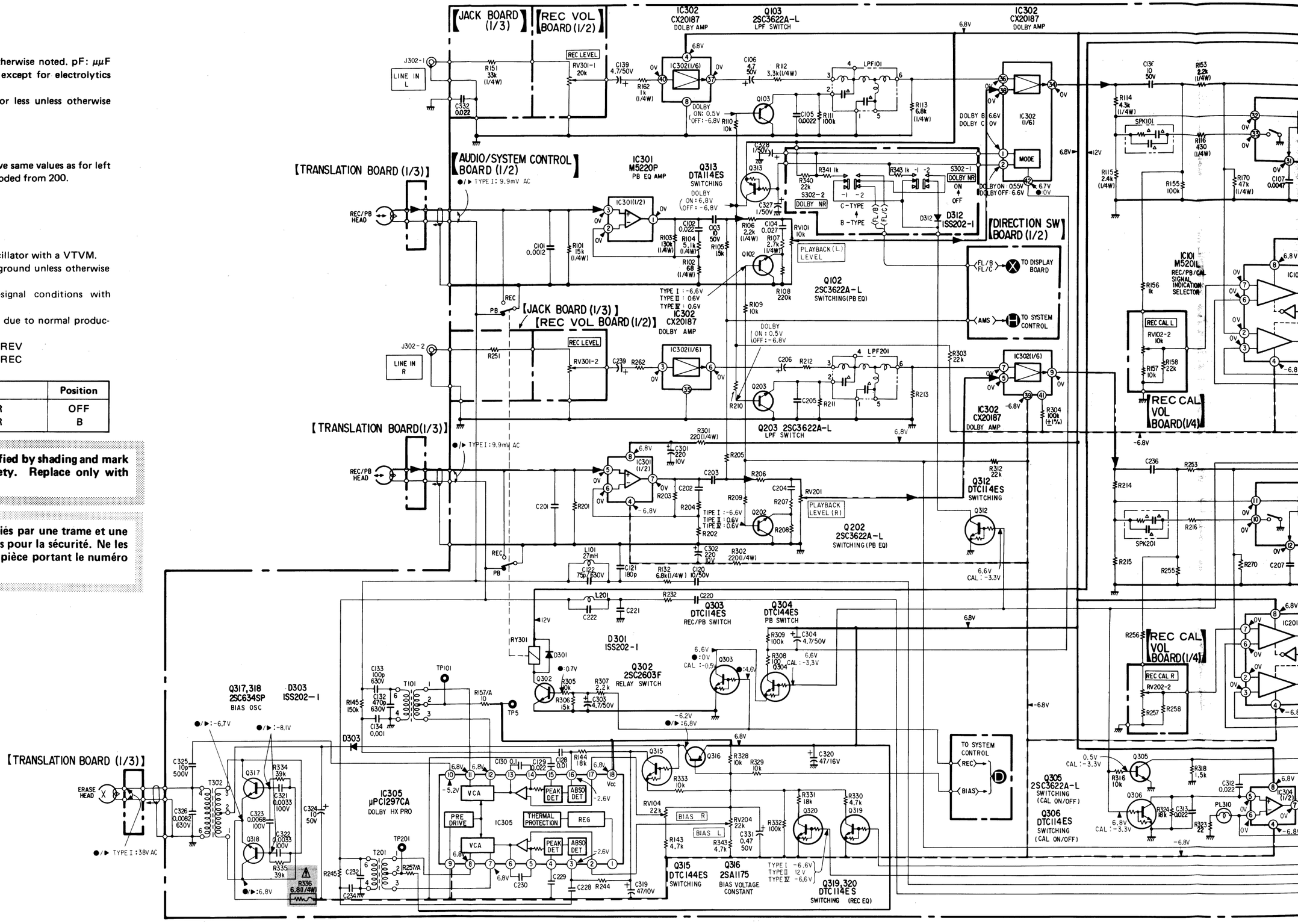
Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/6W or less unless otherwise specified.
- ——▶ : signal path.
- —·—▶ : L-CH signal path.
- – – –▶ : R-CH signal path.
- Components for right channel have same values as for left channel. Reference numbers are coded from 200.
- △ : internal component.
- ⏦ : fusible resistor.
- ——— : B+ bus.
- – – – : B– bus.
- ▭ : adjustment for repair.
- AC voltage readings in the bias oscillator with a VTVM.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken under no-signal conditions with VOM (50kΩ/V).
- Voltage variations may be noted due to normal production tolerances.
- ▶ : FWD ◀◀ : REW ◀ : REV ▶▶ : FF ■ : STOP ● : REC
- Switches

Ref. No.	Switch	Position
S302-1	DOLBY NR	OFF
S302-2	DOLBY NR	B

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note: Les composants identifiés par une trame et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.



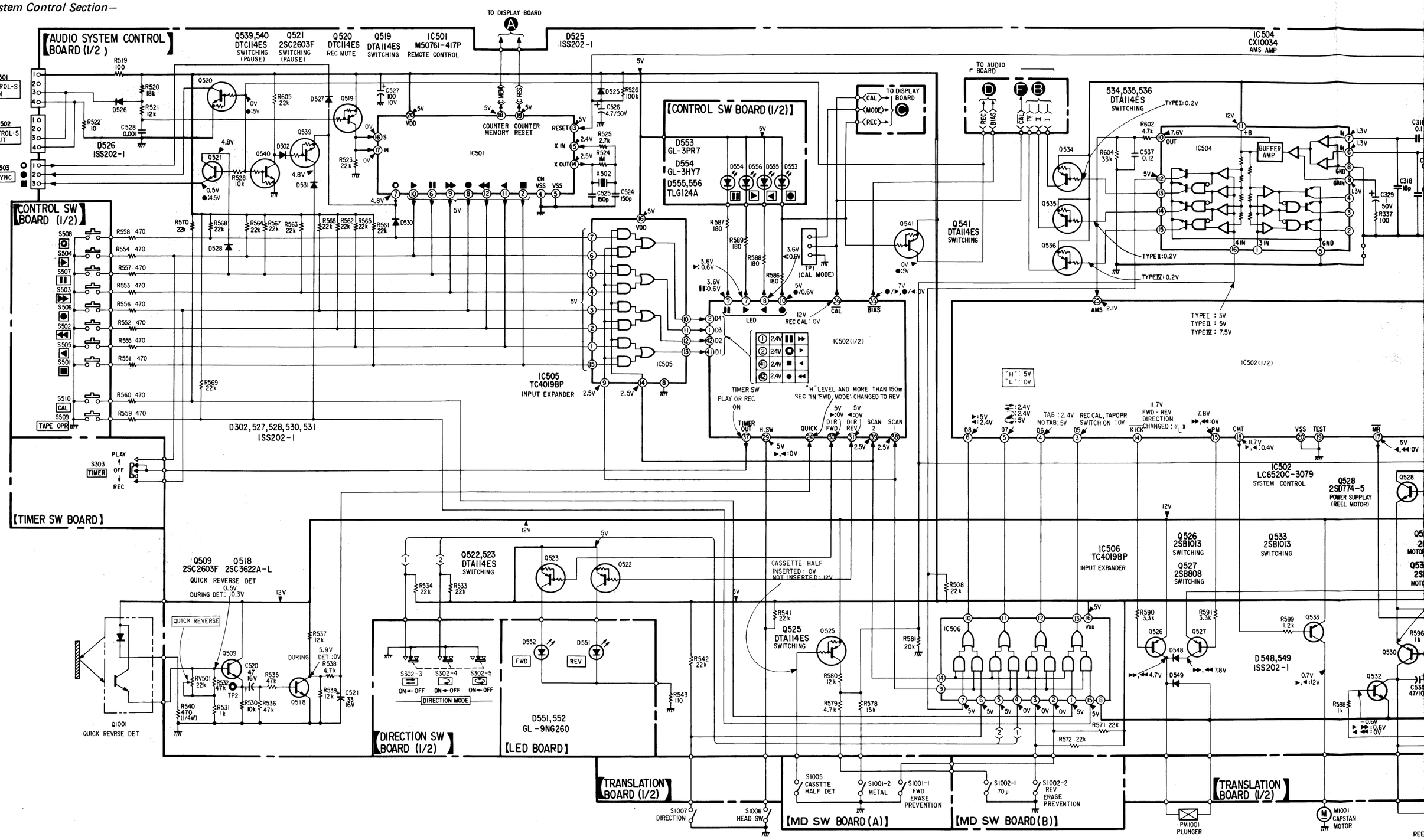
15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

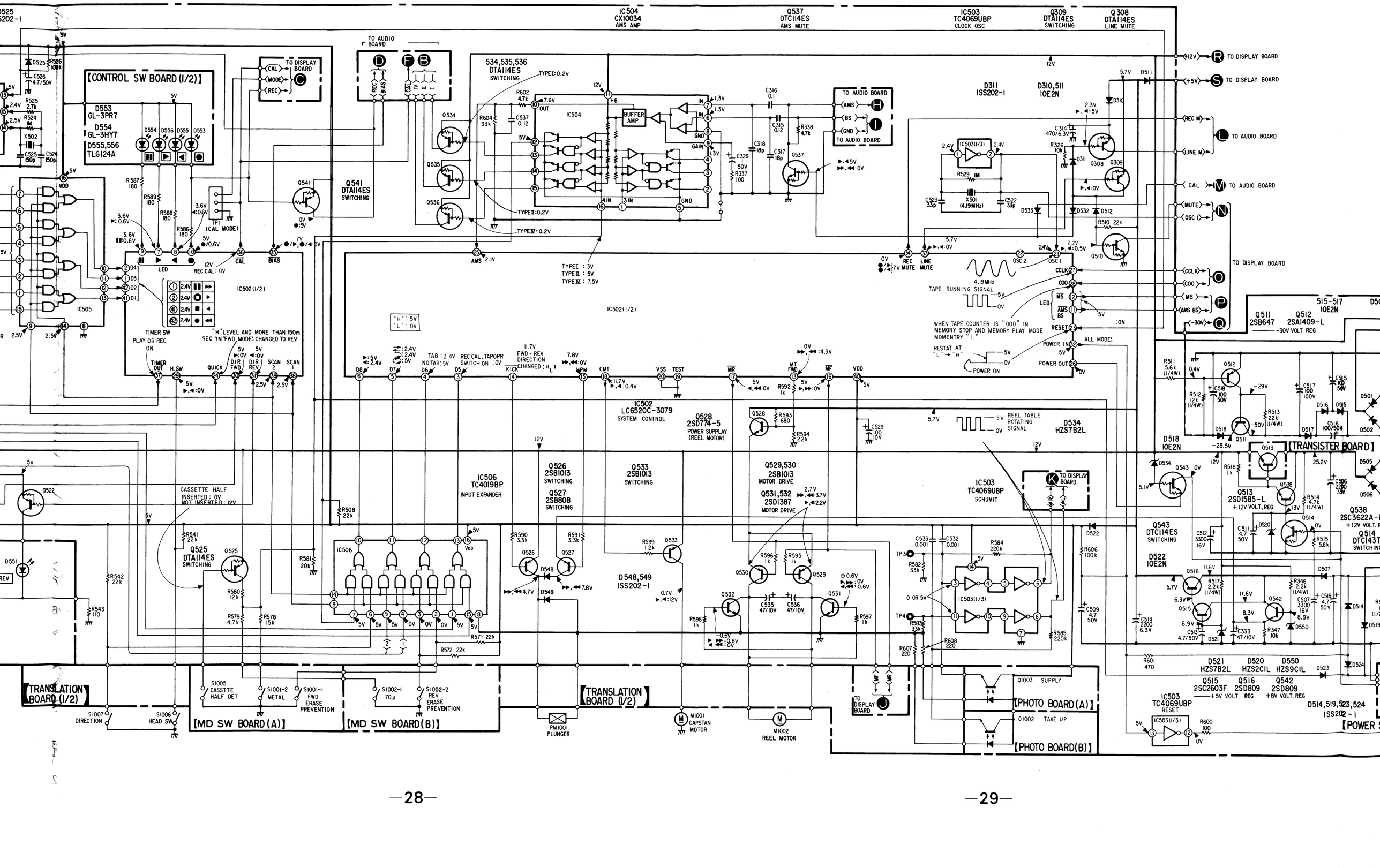
A B C D E F G H I J

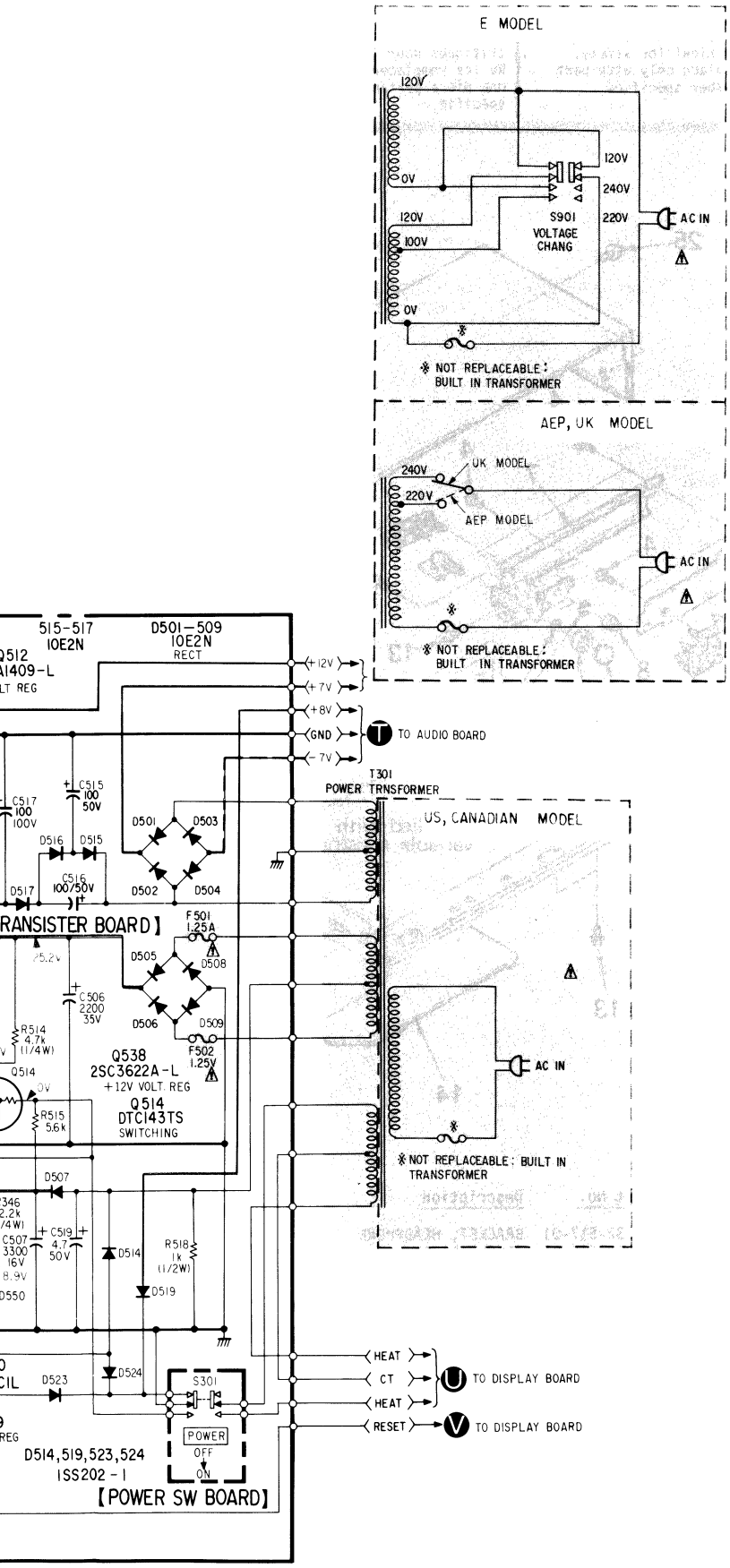
IC302 CX20187 DOLBY AMP
IC308 μPD4066BC SWITCHING
Q104 2SC3622A-L SWITCHING
Q105 2SC3622A-L REC/MUTE
IC303 μPC4570C REC EQ AMP
Q101 2SC2001 LINE MUTE
【HEADPHONE BOARD】
IC307 μPC4570HA HEADPHONE AMP
【REC CAL VOL BOARD(1/4)】
【JACK BOARD (1/3)】
IC302(1/6)
HLS LLS H.DET LDET
REC CAL L
RV102-1 10k
RV102-2 10k
REC CAL R
RV202-1
RV202-2
REC LEVEL
RV103 33k
RV203
R114 4.3k (1/4W)
SPK101
SPK201
R116 430 (1/4W)
R153 8.2k (1/4W)
R155 100k
R156 1k
R157 10k
R158 22k
R170 47k (1/4W)
C107 0.0047
C108 0.47
C109 0.15
C110 0.015
C111 0.22
C112 0.068
C113 0.047
C114 0.0068
C115 0.01
C116 4.7 50V
R119 1k (1/4W)
R120 10k (1/4W)
R121 47k (1/4W)
R124 22k
R125 10k (1/4W)
R126 10k (1/4W)
R127 2.2k
R128 100k (1/4W)
R131 68k (1/4W)
R314 100k
C117 4.7 50V
C306 220 10V
C307 220 10V
C309 1 50V
R146 22k
R148 22k
R149 20k
R150 220 (1/4W)
RV302-1 20k
C135 10 50V
CNJ301 HEADPHONES
R246
RV302-2
R248
R249
R250
C235
R152 1k (1/4W)
R252
J302-3 LINE OUT L
J302-4 LINE OUT R
D510 HZS6AIL VOLTAGE CONSTANT
Q504 2SD809
Q502,503 2SC2603F
Q501 2SK246-GR2
+7V VOLT REG
12V
6.8V
16.2V
7.4V
5.1V
-0.5V
-8V
-7.4V
-16.2V
R505 560 (1/4W) (±1%)
R503 220 (1/4W) (±1%)
R504 1.2k (±1%)
R507 470 (1/4W) (±1%)
C504 1000 10V
C501 2200 25V
C502 2200 25V
C503 100 10V
Q505,506 2SA1175
Q507 2SB731
Q508 2SK246-GR2
-7V VOLT REG
(+12V) (+7V) (+8V) (GND) (-7V)
TO SYSTEM CONTROL BOARD (T)
IC101 M5201L REC/PB/CAL SIGNAL INDICATION SELECTOR
Q301 DTC114ES SWITCHING
IC306 M5218L METER RECT
Q109 DTC114ES SWITCHING(METER DISPLAY)
Q307 DTA144ES SWITCHING
Q310 DTA114ES SWITCHING
Q311 DTA114ES REC MUTE
D101 ISS202-1
D305,513 ISS202-1
D306 ISS202-1
METER LEVEL (L)
CAL METER LEVEL (L)
RV105 47k
RV106 22k
C330 0.0022
C337 4.7 50V
R163 22k
R168 10k
R169 10k
R165 180
R167 1k
R315 10k
R342 10k
R325 10k
C139 3.3 50V
R166 39k
R144 22k
R160 10k
R159 3.9k
R339 22k
R327 4.7k
REC M
LINE M
L
CAL
TO SYSTEM CONTROL BOARD (L)
TO DISPLAY BOARD (Y)
TO SYSTEM CONTROL BOARD (F)
TO SYSTEM CONTROL BOARD (M)
6.9V CAL : 0.6V
-3.1V CAL : 6.5V
CAL :0.5V :0V
1.9V
Q205 2SC3622A-L REC MUTE
Q201 2SC2001 LINE MUTE
Q106-108 2SC3622A-L SWITCHING (TAPE TYPE)
Q206-208 2SC3622A-L SWITCHING (TAPE TYPE)
TYPE IV:0.5V
TYPE II:0.5V
TYPE I:0.5V
TO DISPLAY BOARD (W)
TO SYSTEM CONTROL BOARD (B)
IC201 M5201L REC/PB/CAL SIGNAL INDICATION SELECTOR
IC302 CX20187 DOLBY AMP
Q209 DTC114ES SWITCHING METER DISPLAY)
IC308 μPD4066BC SWITCHING
Q204 2SC3622A-L SWITCHING
METER LEVEL (R)
CAL METER LEVEL (R)
RV205
RV206
C237
R256
R257
R258
R259
R260
R263
R264
R265
R267
R268
R269
C238
R266
D201 ISS202-1
TO DISPLAY BOARD (Z)
TO SYSTEM CONTROL BOARD (I)
IC304 M5218L OSC AMP
Q305
Q306
PL310
C312 0.022
C313 0.022
R318 1.5k
R322 18k
R323 22
R324 18k
R319 47k
R321 300
R320 470
C310 4.7/50V
R317 100k
CAL 0.3Vp-p 2.5msec
L104 10mH
L103 8.2mH
L102 15mH
L204
L203
L202
C126 0.0068
C124 0.01
C125 0.012
C127 0.0056
C123 0.0056
C226
C224
C223
C227
C225
R133 220 (1/4W)
C118 22 25V
R130 39k (1/4W)
C119 0.047
R135 22k (1/4W)
R136 5.1k (1/4W)
R134 8.2k (1/4W)
R138 33k (1/4W)
R139 3.9k (1/4W)
R142 10k
R141 10k
R140 10k
R313 22k
R129 6.8k (1/4W)
R233
R234
R235
R236
R238
R239
R242
R241
R240
R229
C218
R230
C219
D308
D307
D306 ISS202-1
D307,308 ISS202-1
Q206 TYPE IV:0.5V
Q207 TYPE II:0.5V
Q208 TYPE I:0.5V

4-4. SCHEMATIC DIAGRAM

–System Control Section–




[CONTROL SW BOARD (1/2)]
D553 GL-3PR7
D554 GL-3HY7
D555,556 TLG124A
TO DISPLAY BOARD
TO AUDIO BOARD
IC504 CX10034 AMS AMP
Q537 DTC114ES AMS MUTE
IC503 TC4069UBP CLOCK OSC
Q309 DTA114ES SWITCHING
Q308 DTA114ES LINE MUTE
D311 ISS202-1
D310,511 10E2N
534,535,536 DTA114ES SWITCHING
Q541 DTA114ES SWITCHING
IC502 LC6520C-3079 SYSTEM CONTROL
IC506 TC4019BP INPUT EXPANDER
IC505
IC502(1/2)
IC503(1/3)
Q528 2SD774-5 POWER SUPPLY (REEL MOTOR)
Q529,530 2SB1013 MOTOR DRIVE
Q531,532 2SD1387 MOTOR DRIVE
Q526 2SB1013 SWITCHING
Q527 2SB808 SWITCHING
Q533 2SB1013 SWITCHING
Q525 DTA114ES SWITCHING
D534 HZS7B2L
D548,549 ISS202-1
Q543 DTC114ES SWITCHING
D522 10E2N
D521 HZS7B2L
D520 HZS2C1L
D550 HZS9C1L
Q515 2SC2603F
Q516 2SD809
Q542 2SD809
Q511 2SB647
Q512 2SA1409-L
-30V VOLT REG
IC503 TC4069UBP RESET
+5V VOLT. REG
+8V VOLT. REG
D514,519,523,524 ISS202-1
[TRANSISTER BOARD]
[POWER S
[TRANSLATION BOARD (1/2)]
[MD SW BOARD(A)]
[MD SW BOARD(B)]
[PHOTO BOARD(A)]
[PHOTO BOARD(B)]
TAPE RUNNING SIGNAL
4.19MHz
WHEN TAPE COUNTER IS "000" IN MEMORY STOP AND MEMORY PLAY MODE MOMENTRY "L"
RESTAT AT "L" → "H"
POWER ON
ALL MODE:
REEL TABLE ROTATING SIGNAL
CASSETTE HALF INSERTED: 0V NOT INSERTED: 12V
TIMER SW PLAY OR REC ON
"H" LEVEL AND MORE THAN 150m SEC IN FWD. MODE: CHANGED TO REV
TAB: 2.4V NO TAB: 5V
REC CAL, TAPOPR SWITCH ON: 0V
FWD-REV DIRECTION CHANGED: "L"
"H": 5V
"L": 0V
TYPE I: 0.2V
TYPE II: 0.2V
TYPE IV: 0.2V
TYPE I: 3V
TYPE II: 5V
TYPE IV: 7.5V
TP1 (CAL MODE)
S1005 CASSTTE HALF DET
S1001-2 METAL
S1001-1 FWD ERASE PREVENTION
S1002-1 70μ
S1002-2 REV ERASE PREVENTION
S1007 DIRECTION
S1006 HEAD SW
PM1001 PLUNGER
M1001 CAPSTAN MOTOR
M1002 REEL MOTOR



Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- : nonflammable resistor.
- : fusible resistor.
- : B+ bus.
- : B- bus.
- : adjustment for repair.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken under no signal conditions with VOM (50kΩ/V).
- ▶ : FWD ◀◀ : REW ● : REC : REC MUTE
  ▶▶ : FF ■ : STOP ◀ : REV : PAUSE
- Switches

Ref. No.	Switch	Position
S301	POWER	OFF
S501 ~ S510	OPERATION KEYBOARD SWITCH	OFF
S303	TIMER	OFF
S302-3	DIRECTION MODE	⇄
S1001-1	ERASE PREVENTION (FWD)	BE CLAW
S1002-1	70/120μ	TYPE 1
S1001-2	METAL	TYPE 1
S1002-2	ERASE PREVENTION (REV)	BE CLAW
S1005	CASSETTE HALF DET	NO CLAW
S1006	HEAD SW	FWD
S1007	DIRECTION	FWD

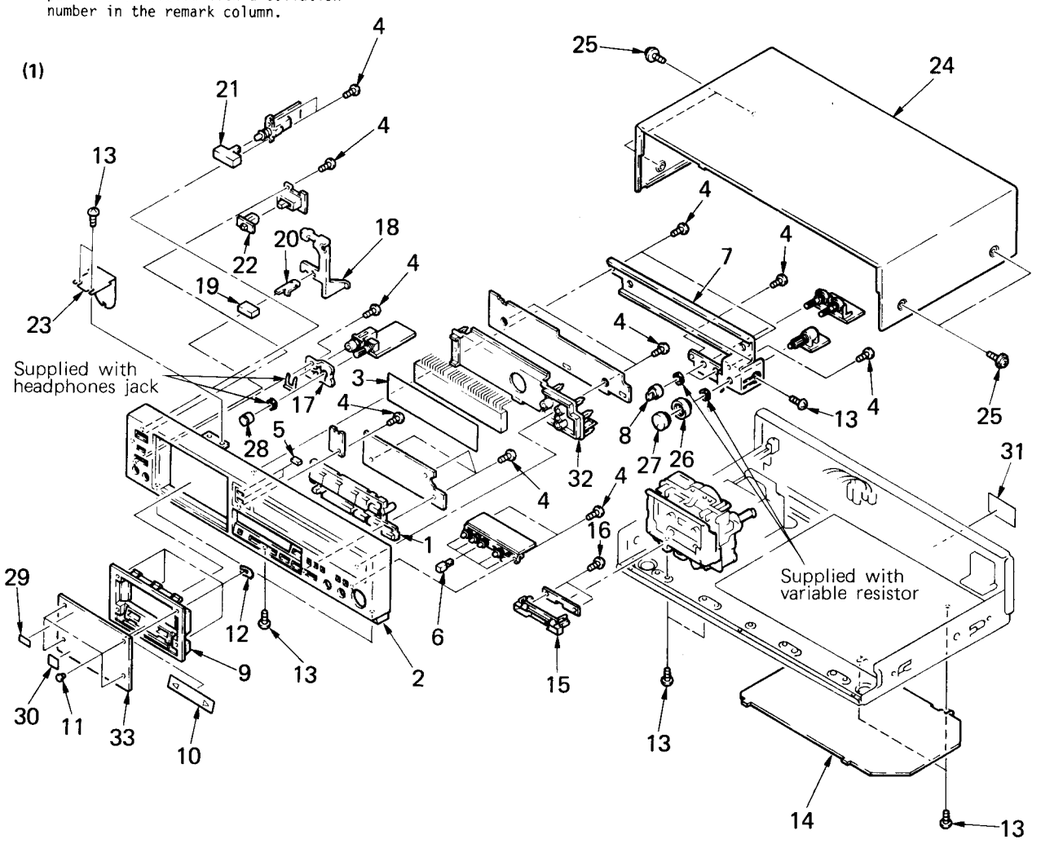
Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note: Les composants identifiés par une trame et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

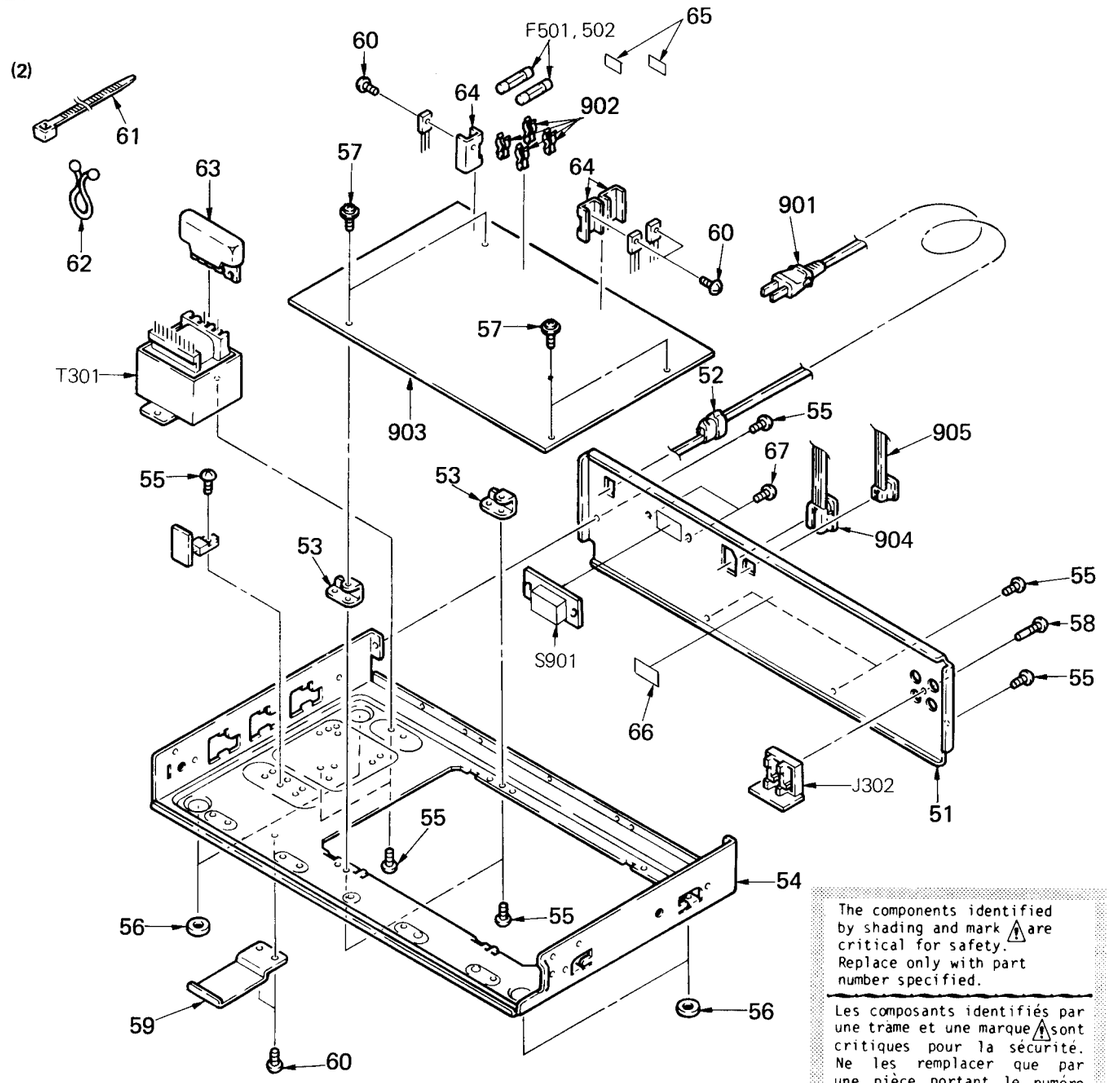
SECTION 5
EXPLODED VIEWS AND PARTS LIST

NOTE:
- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked " ★ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The construction parts of an assembled part are indicated with a collation number in the remark column.

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une trame et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.



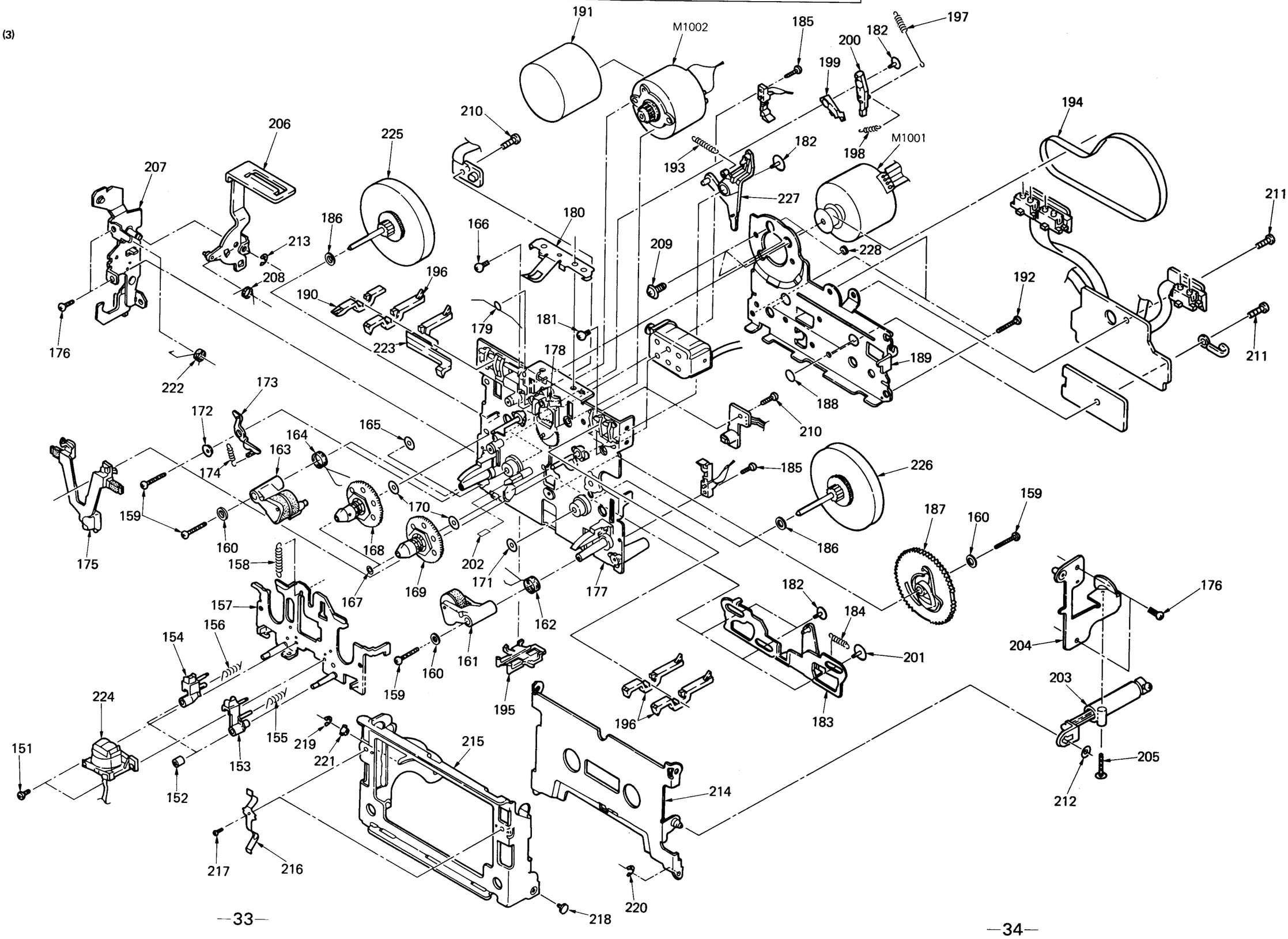
No.	Part No.	Description	Remarks
1	X-3332-502-1	BUTTON ASSY, CONTROL	
2	X-3332-504-1	(US,Canadian)...PANEL ASSY, FRONT	
	X-3332-505-1	(AEP,UK,E).....PANEL ASSY, FRONT	
3	*3-332-505-01	FILTER	
4	7-685-646-71	SCREW +BVTP 3X8 TYPE2 N-S	
5	3-332-502-01	BUTTON, RESET	
6	4-855-804-11	KNOB, SQUARE	
7	*3-332-508-01	CHASSIS (H), SUB	
8	3-304-929-11	KNOB, HEADPHONE	
9	3-332-526-01	LID, CASSETTE	
10	3-332-530-11	PLATE, INDICATION, DIRECTION	
11	3-330-003-01	PIN, STOPPER, CASSETTE WINDOW	
12	3-324-813-01	SPRING	
13	7-685-752-04	SCREW +BVTT 3X8 (S)	
14	*3-332-418-01	PLATE, BOTTOM	
15	3-332-532-01	HOUSE, LED	
16	7-685-133-14	SCREW +BTP 2.6X6 TYPE2 N-S	
17	*3-332-517-01	BRACKET, HEADPHONE	
18	*3-332-516-01	LEVER, EJECT	
19	3-304-419-31	BUTTON, EJECT	
20	*3-332-515-01	SLIDER, EJECT	
21	3-332-417-01	KNOB (POWER), PUSH	
22	3-307-538-21	KNOB, SWITCH, TIMER	
23	*3-333-616-01	PLATE, SHIELD, REEL MOTOR	
24	3-332-511-01	CASE	
25	4-886-821-01	SCREW, M3 CASE	
26	3-332-519-01	KNOB (LEFT), REC VOL	
27	3-332-518-01	KNOB (RIGHT), REC VOL	
28	4-902-067-11	KNOB, CONTROL	
29	4-911-673-01	SHEET, CAVER	
30	3-703-710-41	STICKER, SONY SYMBOL (12)	
31	4-302-759-00	LABEL, SERIAL NUMBER	
32	*3-332-507-01	HOLDER, FL TUBE	
33	3-332-514-11	WINDOW, CASSETTE	



No.	Part No.	Description	Remarks
51	*3-332-509-01	(US,Canadian)...PLATE, JACK	
	3-332-509-21	(E).....PLATE, JACK	
	3-332-509-31	(AEP)....PLATE, JACK	
	3-332-509-41	(UK).....PLATE, JACK	
52	3-703-244-00	(AEP,UK).....BUSHING, CORD	
	3-703-571-00	(US,Canadian)...BUSHING (S)(4516), CORD	
53	*3-332-410-01	BRACKET (2), PC BOARD	
54	*3-332-426-11	CHASSIS	
55	7-685-752-04	SCREW +BVTT 3X8 (S)	
56	3-576-731-00	FELT (H)	
57	3-703-249-01	SCREW, S TIGHT, +PTTWH 3X6	
58	3-703-473-00	SCREW, TERMINAL	
59	*3-332-534-01	PLATE, SHIELD, HEAD	
60	7-685-871-01	SCREW +BVTT 3X6 (S)	
61	3-701-748-00	CLAMP	
62	3-315-159-01	PURSE LOCK (DIA. 14)	
63	*3-332-444-01	COVER, TRANSFORMER SAFETY	
64	*3-312-615-31	HEAT SINK	
65	3-701-948-15	(AEP,UK,E)...LABEL FUSE	
66	3-703-044-26	(US,Canadian)...LABEL, CAUTION	
67	7-685-133-14	SCREW +BTP 2.6X6 TYPE2 N-S	
901	⚠.1-534-817-XX	(AEP).....CORD, POWER	
	⚠.1-551-188-XX	(E).....CORD, POWER	
	⚠.1-551-628-00	(US,Canadian)...CORD, POWER	
	⚠.1-551-884-00	(UK).....CORD, POWER	
902	1-533-162-00	HOLDER, FUSE	
903	*A-2095-583-A	MOUNTED PCB, AUDIO	
F501	⚠.1-532-285-11	(AEP,UK,E).....FUSE (1.25A)	
F501	⚠.1-532-741-11	(US,Canadian)...FUSE, GLASS TUBE (1.25A)	
F502	⚠.1-532-285-11	(AEP,UK,E).....FUSE (1.25A)	
F502	⚠.1-532-741-11	(US,Canadian)...FUSE, GLASS TUBE (1.25A)	
J302	1-507-908-11	JACK, PIN 4P (LINE)	
S901	⚠.1-570-307-11	(E)....SWITCH, VOLTAGE CHANGE	
T301	⚠.1-448-551-11	(US,Canadian)...TRANSFORMER, POWER	
T301	⚠.1-448-552-11	(AEP,UK).....TRANSFORMER, POWER	
T301	⚠.1-448-553-11	(E).....TRANSFORMER, POWER	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une trame et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

(3)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M1002
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M1001
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No.	Part No.	Description	Remarks
151	3-391-109-01	SCREW, WASHER	
152	3-391-110-01	NUT, ADJUSTMENT	
153	3-391-111-01	GUIDE, TAPE	
154	X-3391-124-1	SENCER ASSY	
155	3-391-112-01	SPRING (RIGHT)	
156	3-391-113-01	SPRING (LEFT)	
157	X-3391-103-1	HEAD ASSY, PLATE	
158	3-391-114-01	SPRING	
159	7-685-107-21	SCREW +P 2X12 TYPE2 SLIT	
160	7-688-001-11	W 2, MIDDLE	
161	X-3391-104-1	PINCH ROLLER ASSY	
162	3-391-115-01	SPRING (RIGHT)	
163	X-3391-105-1	PINCH ROLLER ASSY	
164	3-391-116-01	SPRING (LEFT)	
165	3-391-117-01	SEAL, WASHER OIL	
166	3-391-118-01	SCREW, WASHER	
167	3-701-436-11	WASHER, 1.6	
168	X-3391-106-1	REEL ASSY	
169	X-3391-107-1	REEL ASSY, T.U	
170	3-327-708-31	WASHER	
171	3-391-119-01	SEAL, WASHER OIL	
172	3-391-120-01	CALLOR	
173	3-391-121-01	ARM, EJECT SAFETY	
174	3-391-122-01	SPRING (A)	
175	X-3391-108-1	BRAKE ASSY	
176	7-685-790-04	SCREW +PTT 2.6X4 (S)	
177	X-3391-110-1	CHASSIS ASSY	
178	X-3391-111-1	IDLER ASSY	
179	3-391-124-01	SPRING	
180	3-391-125-01	SPRING	
181	7-628-253-95	SCREW +PS 2.6X4	
182	3-391-126-01	CAP	
183	X-3391-112-1	PLATE ASSY, SLIDE	
184	3-391-127-01	SPRING	
185	7-685-104-14	SCREW +P 2X6 TYPE2 SLIT	
186	3-701-438-11	WASHER, 2.5	
187	3-391-128-01	GEAR (B), CAM	
188	3-391-129-01	SPACER	
189	*3-391-130-01	BRACKET (B), F/W	
190	3-391-131-01	LEVER, PACK INSPECTION	
191	3-391-132-01	PLATE, SHIELD	
192	7-685-131-19	SCREW +P 2.6X4 TYPE2 NON-SLIT	
193	3-391-133-01	SPRING	
194	3-391-134-01	BELT, MAIN	
195	3-391-137-01	HOLDER, REED	
196	3-391-157-01	LEVER, REC INSPECTION	
197	3-391-139-01	SPRING	
198	3-391-140-01	SPRING (A)	
199	3-391-141-01	ARM (A)	
200	3-391-142-01	ARM (B)	
201	3-391-143-01	CAP	
202	3-391-162-01	REFLECTOR	
203	*X-3391-115-1	DAMPER ASSY	
204	*3-391-144-01	BRACKET (R), DAMPER	
205	7-621-955-75	SCREW, TOTSU PWH 2X12	
206	3-391-163-01	LEVER (B), EJECT	
207	X-3391-126-1	ARM ASSY, EJECT	
208	3-391-146-01	SPRING (B)	
209	3-391-147-01	SCREW, MOTOR FITTING	
210	7-624-105-04	STOP RING 2.3, TYPE -E	
211	7-685-781-04	SCREW +BVTT 2X4 (S)	
212	*3-391-148-01	WASHER LOCK	
213	7-685-105-14	SCREW +P 2X8 TYPE2 SLIT	
214	3-391-149-01	PLATE, ORNAMENTAL	
215	3-391-150-01	HOLDER, CASSETTE	
216	3-391-151-01	SPRING	
217	7-685-780-04	SCREW +PTT 2X3 (S)	
218	3-391-152-01	STUD, DOOR	
219	7-624-104-04	STOP RING 2.0, TYPE -E	
220	7-624-102-04	STOP RING 1.5, TYPE -E	
221	3-391-153-01	ROLLER	
222	3-391-154-01	SPRING (A)	
223	3-391-159-01	LEVER, METAL INSPECTION	
224	X-3391-132-1	HEAD ASSY, ROTARY	
225	X-3391-129-1	ASSY F/W	
226	X-3391-133-1	ASSY F/W	
227	X-3391-114-1	ARM ASSY, PLAY	
228	3-391-138-01	MOTOR, CUSHION	

SECTION 6
ELECTRICAL PARTS LIST

NOTE:
- Items marked " ★ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuitsin a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:
MF:μF, PF:μμF.

RESISTORS
- All resistors are in ohms.
- F : nonflammable

COILS
- MMH : mH, UH : μH

SEMICONDUCTORS
In each case, U : μ, for example:
UA...: μA..., UPA...: μPA..., UPC...: μPC, UPD...: μPD...

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
901	⚠ 1-534-817-XX	(AEP).....CORD, POWER			
	⚠ 1-551-188-XX	(E).....CORD, POWER			
	⚠ 1-551-628-00	(US,Canadian)...CORD, POWER			
	⚠ 1-551-884-00	(UK).....CORD, POWER			
902	1-533-162-00	HOLDER, FUSE			
903	*A-2095-583-A	MOUNTED PCB, AUDIO			
904	*1-558-235-11	CORD (WITH CONNECTOR) 4P			
905	*1-558-520-11	CORD (WITH CONNECTOR) 3P			
906	1-618-917-11	PC BOARD, METER			
C101	1-110-196-00	MYLAR	0.0012MF	5%	50V
C102	1-136-157-00	FILM	0.022MF	5%	50V
C103	1-124-186-00	ELECT	10MF	20%	50V
C104	1-136-158-00	FILM	0.027MF	5%	50V
C105	1-162-302-31	CERAMIC	0.0022MF	30%	16V
C106	1-124-927-11	ELECT	4.7MF	20%	50V
C107	1-110-203-00	MYLAR	0.0047MF	5%	50V
C108	1-136-173-00	FILM	0.47MF	5%	50V
C109	1-136-167-00	FILM	0.15MF	5%	50V
C110	1-136-155-00	FILM	0.015MF	5%	50V
C111	1-136-169-00	FILM	0.22MF	5%	50V
C112	1-136-163-00	FILM	0.068MF	5%	50V
C113	1-136-161-00	FILM	0.047MF	5%	50V
C114	1-110-205-00	MYLAR	0.0068MF	5%	50V
C115	1-136-153-00	FILM	0.01MF	5%	50V
C116	1-124-927-11	ELECT	4.7MF	20%	50V
C117	1-124-927-11	ELECT	4.7MF	20%	50V
C118	1-124-481-11	ELECT	22MF	20%	25V
C119	1-136-161-00	FILM	0.047MF	5%	50V
C120	1-124-186-00	ELECT	10MF	20%	50V
C121	1-162-285-31	CERAMIC	180PF	10%	50V
C122	1-136-273-91	FILM	75PF	5%	630V
C123	1-110-204-00	MYLAR	0.0056MF	5%	50V
C124	1-136-153-00	FILM	0.01MF	5%	50V
C125	1-136-154-00	FILM	0.012MF	5%	50V
C126	1-110-204-00	MYLAR	0.0056MF	5%	50V
C127	1-110-204-00	MYLAR	0.0056MF	5%	50V
C128	1-136-153-00	FILM	0.01MF	5%	50V
C129	1-136-157-00	FILM	0.022MF	5%	50V
C130	1-136-165-00	FILM	0.1MF	5%	50V
C132	1-136-478-11	FILM	470PF	5%	630V
C133	1-136-433-11	FILM	100PF	5%	630V
C134	1-110-195-00	MYLAR	0.001MF	5%	50V
C135	1-124-907-00	ELECT	10MF	20%	50V
C136	1-124-186-00	ELECT	10MF	20%	50V
C137	1-124-185-00	ELECT	4.7MF	20%	50V

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
C138	1-124-905-11	ELECT	3.3MF	20%	50V
C139	1-124-927-11	ELECT	4.7MF	20%	50V
C301	1-124-444-00	ELECT	220MF	20%	10V
C302	1-124-444-00	ELECT	220MF	20%	10V
C303	1-124-927-11	ELECT	4.7MF	20%	50V
C304	1-124-927-11	ELECT	4.7MF	20%	50V
C307	1-124-444-00	ELECT	220MF	20%	10V
C308	1-124-444-00	ELECT	220MF	20%	10V
C309	1-124-903-00	ELECT	1MF	20%	50V
C310	1-124-927-11	ELECT	4.7MF	20%	50V
C312	1-136-157-00	FILM	0.022MF	5%	50V
C313	1-136-157-00	FILM	0.022MF	5%	50V
C314	1-124-470-11	ELECT	470MF	20%	6.3V
C315	1-136-166-00	FILM	0.12MF	5%	50V
C316	1-136-165-00	FILM	0.1MF	5%	50V
C317	1-162-205-31	CERAMIC	18PF	5%	50V
C318	1-162-205-31	CERAMIC	18PF	5%	50V
C319	1-124-892-11	ELECT	47MF	20%	10V
C320	1-123-332-00	ELECT	47MF	20%	16V
C321	1-130-285-00	FILM	0.0033MF	5%	100V
C322	1-130-285-00	FILM	0.0033MF	5%	100V
C323	1-130-293-00	FILM	0.0068MF	5%	100V
C324	1-124-907-00	ELECT	10MF	20%	50V
C325	1-107-202-00	MICA	10PF	5%	500V
C326	1-129-713-00	FILM	0.0082MF	10%	630V
C327	1-124-903-00	ELECT	1MF	20%	50V
C328	1-124-903-00	ELECT	1MF	20%	50V
C329	1-124-903-00	ELECT	1MF	20%	50V
C330	1-162-302-31	CERAMIC	0.0022MF	30%	16V
C331	1-124-902-00	ELECT	0.47MF	20%	50V
C332	1-161-494-00	CERAMIC	0.022MF	30%	25V
C333	1-124-892-11	ELECT	47MF	20%	10V
C501	1-124-563-11	ELECT	2200MF	20%	25V
C502	1-124-563-11	ELECT	2200MF	20%	25V
C503	1-124-443-00	ELECT	100MF	20%	10V
C504	1-124-473-11	ELECT	1000MF	20%	10V
C505	1-124-473-11	ELECT	1000MF	20%	10V
C506	1-124-618-11	ELECT	2200MF	20%	35V
C507	1-124-898-11	ELECT	4700MF	20%	16V
C509	1-124-927-11	ELECT	4.7MF	20%	50V
C511	1-124-927-11	ELECT	4.7MF	20%	50V
C512	1-124-897-11	ELECT	3300MF	20%	16V
C513	1-124-927-11	ELECT	4.7MF	20%	50V
C514	1-124-888-11	ELECT	2200MF	20%	6.3V
C515	1-124-122-11	ELECT	100MF	20%	50V

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
C516	1-124-122-11	ELECT	100MF	20%	50V
C517	1-124-932-11	ELECT	100MF	20%	100V
C518	1-124-122-11	ELECT	100MF	20%	50V
C519	1-124-927-11	ELECT	4.7MF	20%	50V
C520	1-123-332-00	ELECT	47MF	20%	16V
C521	1-124-896-00	ELECT	33MF	20%	16V
C522	1-162-211-31	CERAMIC	33PF	5%	50V
C523	1-162-211-31	CERAMIC	33PF	5%	50V
C524	1-162-284-31	CERAMIC	150PF	10%	50V
C525	1-162-284-31	CERAMIC	150PF	10%	50V
C526	1-124-927-11	ELECT	4.7MF	20%	50V
C527	1-124-443-00	ELECT	100MF	20%	10V
C528	1-162-294-31	CERAMIC	0.001MF	10%	50V
C529	1-124-443-00	ELECT	100MF	20%	10V
C532	1-162-294-31	CERAMIC	0.001MF	10%	50V
C533	1-162-294-31	CERAMIC	0.001MF	10%	50V
C535	1-124-892-11	ELECT	47MF	20%	10V
C536	1-124-892-11	ELECT	47MF	20%	10V
C537	1-136-166-00	FILM	0.12MF	5%	50V
C760	1-123-661-00	ELECT	100MF	20%	6.3V
C761	1-162-306-31	CERAMIC	0.01MF	30%	16V
CNP301*1-564-509-11		PLUG, CONNECTOR 6P			
CNP302*1-564-506-11		PLUG, CONNECTOR 3P			
CNP303*1-564-508-11		PLUG, CONNECTOR 5P			
CNP304*1-564-506-11		PLUG, CONNECTOR 3P			
CNP305*1-564-506-11		PLUG, CONNECTOR 3P			
CNP307*1-564-508-11		PLUG, CONNECTOR 5P			
CNP308*1-564-507-21		PLUG, CONNECTOR 4P			
CNP505*1-564-507-11		PLUG, CONNECTOR 4P			
CNP507*1-564-506-11		PLUG, CONNECTOR 3P			
CNP509*1-564-339-00		PIN, CONNECTOR 5P			
CNP510*1-564-340-00		PIN, CONNECTOR 6P			
CNP511*1-564-339-00		PIN, CONNECTOR 5P			
CNP512*1-564-506-11		PLUG, CONNECTOR 3P			
CNP701*1-564-510-11		PLUG, CONNECTOR 7P			
CNP702*1-564-505-11		PLUG, CONNECTOR 2P			
CNP703*1-564-506-11		PLUG, CONNECTOR 3P			
CNP704*1-564-508-11		PLUG, CONNECTOR 5P			
CNP705*1-564-509-11		PLUG, CONNECTOR 6P			
CNP706*1-564-505-31		PLUG, CONNECTOR 2P			
CNP708*1-564-506-11		PLUG, CONNECTOR 3P			
CNP709*1-564-505-41		PLUG, CONNECTOR 2P			
CP701	1-232-239-00	COMPOSITION CIRCUIT BLOCK			
D101	8-719-107-94	DIODE 1SS202-1			
D201	8-719-107-94	DIODE 1SS202-1			
D301	8-719-107-94	DIODE 1SS202-1			
D302	8-719-107-94	DIODE 1SS202-1			
D303	8-719-107-94	DIODE 1SS202-1			
D305	8-719-107-94	DIODE 1SS202-1			
D306	8-719-107-94	DIODE 1SS202-1			
D307	8-719-107-94	DIODE 1SS202-1			
D308	8-719-107-94	DIODE 1SS202-1			
D310	8-719-200-77	DIODE 10E2N			
D311	8-719-107-94	DIODE 1SS202-1			
D312	8-719-107-94	DIODE 1SS202-1			
D501	8-719-200-77	DIODE 10E2N			
D502	8-719-200-77	DIODE 10E2N			
D503	8-719-200-77	DIODE 10E2N			

ELECTRICAL PARTS

Ref.No.	Part No.	Description
D504	8-719-200-77	DIODE 10E2N
D505	8-719-200-77	DIODE 10E2N
D506	8-719-200-77	DIODE 10E2N
D507	8-719-200-77	DIODE 10E2N
D508	8-719-200-77	DIODE 10E2N
D509	8-719-200-77	DIODE 10E2N
D510	8-719-933-33	DIODE HZS6A1L
D511	8-719-200-77	DIODE 10E2N
D512	8-719-107-94	DIODE 1SS202-1
D513	8-719-107-94	DIODE 1SS202-1
D514	8-719-107-94	DIODE 1SS202-1
D515	8-719-200-77	DIODE 10E2N
D516	8-719-200-77	DIODE 10E2N
D517	8-719-200-77	DIODE 10E2N
D518	8-719-200-77	DIODE 10E2N
D519	8-719-107-94	DIODE 1SS202-1
D520	8-719-933-79	DIODE HZS12C1L
D521	8-719-933-47	DIODE HZS7B2L
D522	8-719-200-77	DIODE 10E2N
D523	8-719-107-94	DIODE 1SS202-1
D524	8-719-107-94	DIODE 1SS202-1
D525	8-719-107-94	DIODE 1SS202-1
D526	8-719-107-94	DIODE 1SS202-1
D527	8-719-107-94	DIODE 1SS202-1
D528	8-719-107-94	DIODE 1SS202-1
D530	8-719-107-94	DIODE 1SS202-1
D531	8-719-107-94	DIODE 1SS202-1
D532	8-719-107-94	DIODE 1SS202-1
D533	8-719-107-94	DIODE 1SS202-1
D534	8-719-933-47	DIODE HZS7B2L
D548	8-719-107-94	DIODE 1SS202-1
D549	8-719-107-94	DIODE 1SS202-1
D550	8-719-933-47	DIODE HZS9C1L
D551	8-719-919-20	DIODE GL-9NG26O
D552	8-719-919-20	DIODE GL-9NG26O
D553	8-719-933-27	DIODE GL-3PR7
D554	8-719-919-00	DIODE GL-3HY7
D555	8-719-812-43	DIODE TLG124A
D556	8-719-812-43	DIODE TLG124A
D731	8-719-107-94	DIODE 1SS202-1
D732	8-719-107-94	DIODE 1SS202-1
D760	8-719-107-94	DIODE 1SS202-1
D761	8-719-301-43	DIODE SEL2410E
D762	8-719-301-43	DIODE SEL2410E
D763	8-719-301-43	DIODE SEL2410E
D764	8-719-107-94	DIODE 1SS202-1
D765	8-719-107-94	DIODE 1SS202-1
D766	8-719-301-43	DIODE SEL2410E
D767	8-719-301-43	DIODE SEL2410E
D768	8-719-107-94	DIODE 1SS202-1
D769	8-719-107-94	DIODE 1SS202-1
D770	8-719-107-94	DIODE 1SS202-1
D771	8-719-933-58	DIODE HZS9B3L
D772	8-719-107-94	DIODE 1SS202-1
D773	8-719-107-94	DIODE 1SS202-1
D774	8-719-107-94	DIODE 1SS202-1
D775	8-719-107-94	DIODE 1SS202-1
D776	8-719-107-94	DIODE 1SS202-1

ELECTRICAL PARTS

Ref.No.	Part No.	Description
F501 ⚠	.1-532-285-11	(AEP,UK,E).....FUSE (1.25A)
F501 ⚠	.1-532-741-11	(US,Canadian)..FUSE, GLASS TUBE(1.25A)
F502 ⚠	.1-532-285-11	(AEP,UK,E).....FUSE (1.25A)
F502 ⚠	.1-532-741-11	(US,Canadian)..FUSE, GLASS TUBE(1.25A)
FL101	1-519-340-11	INDICATOR TUBE, FLUORESCENT
IC101	8-759-602-48	IC M5201L
IC201	8-759-602-48	IC M5201L
IC301	8-759-602-01	IC M5220P
IC302	8-752-018-70	IC CX20187
IC303	8-759-106-41	IC UPC457OC
IC304	8-759-600-02	IC M5218L
IC305	8-759-106-56	IC UPC1297CA
IC306	8-759-600-02	IC M5218L
IC307	8-759-106-61	IC UPC457OHA
IC308	8-759-240-66	IC TC4066BP
IC501	8-759-602-47	IC M50761-417P
IC502	8-759-802-56	IC LC6520C-3079
IC503	8-759-240-69	IC TC4069UBP
IC504	8-759-700-46	IC CX10034
IC505	8-759-240-19	IC TC4019BP
IC506	8-759-240-19	IC TC4019BP
IC701	8-759-302-98	IC HD614042SA87
IC703	8-759-240-69	IC TC4069UBP
IC704	8-759-700-48	IC NJM2903S
J301	1-507-796-21	JACK
J302	1-507-908-11	JACK, PIN 4P (LINE)
L101	1-408-929-00	MICRO INDUCTOR 27MMH
L102	1-408-926-11	MICRO INDUCTOR 15MMH
L103	1-408-923-00	MICRO INDUCTOR 8.2MMH
L104	1-408-924-00	MICRO INDUCTOR 10MMH
L201	1-408-929-00	MICRO INDUCTOR 27MMH
L202	1-408-926-11	MICRO INDUCTOR 15MMH
L203	1-408-923-00	MICRO INDUCTOR 8.2MMH
L204	1-408-924-00	MICRO INDUCTOR 10MMH
LPF101	1-231-388-00	FILTER, LOW PASS
LPF201	1-231-388-00	FILTER, LOW PASS
M1001	X-3391-130-1	MOTOR ASSY
M1002	X-3391-131-1	MOTOR ASSY
PL301	1-518-386-00	LAMP, PILOT
PM1001	1-454-428-11	SOLENOID, PLUNGER
Q101	8-729-100-13	TRANSISTOR 2SC2001-K2
Q102	8-729-107-88	TRANSISTOR 2SC3622A-L
Q103	8-729-107-88	TRANSISTOR 2SC3622A-L
Q104	8-729-107-88	TRANSISTOR 2SC3622A-L
Q105	8-729-107-88	TRANSISTOR 2SC3622A-L
Q106	8-729-107-88	TRANSISTOR 2SC3622A-L
Q107	8-729-107-88	TRANSISTOR 2SC3622A-L
Q108	8-729-107-88	TRANSISTOR 2SC3622A-L
Q109	8-729-900-80	TRANSISTOR DTC114ES
Q201	8-729-100-13	TRANSISTOR 2SC2001-K2
Q202	8-729-107-88	TRANSISTOR 2SC3622A-L
Q203	8-729-107-88	TRANSISTOR 2SC3622A-L
Q204	8-729-107-88	TRANSISTOR 2SC3622A-L
Q205	8-729-107-88	TRANSISTOR 2SC3622A-L
Q206	8-729-107-88	TRANSISTOR 2SC3622A-L

ELECTRICAL PARTS

Ref.No.	Part No.	Description
Q207	8-729-107-88	TRANSISTOR 2SC3622A-L
Q208	8-729-107-88	TRANSISTOR 2SC3622A-L
Q209	8-729-900-80	TRANSISTOR DTC114ES
Q301	8-729-900-80	TRANSISTOR DTC114ES
Q302	8-729-606-33	TRANSISTOR 2SC2603F
Q303	8-729-900-80	TRANSISTOR DTC114ES
Q304	8-729-900-80	TRANSISTOR DTC144ES
Q305	8-729-107-88	TRANSISTOR 2SC3622A-L
Q306	8-729-900-80	TRANSISTOR DTC114ES
Q307	8-729-900-65	TRANSISTOR DTA144ES
Q308	8-729-900-61	TRANSISTOR DTA114ES
Q309	8-729-900-61	TRANSISTOR DTA114ES
Q310	8-729-900-61	TRANSISTOR DTA114ES
Q311	8-729-900-61	TRANSISTOR DTA114ES
Q312	8-729-900-80	TRANSISTOR DTC114ES
Q313	8-729-900-61	TRANSISTOR DTA114ES
Q315	8-729-900-80	TRANSISTOR DTC144ES
Q316	8-729-117-54	TRANSISTOR 2SA1175
Q317	8-729-600-27	TRANSISTOR 2SC634SP
Q318	8-729-600-27	TRANSISTOR 2SC634SP
Q319	8-729-900-80	TRANSISTOR DTC114ES
Q320	8-729-900-80	TRANSISTOR DTC114ES
Q501	8-729-201-56	TRANSISTOR 2SK246-GR2
Q502	8-729-606-33	TRANSISTOR 2SC2603F
Q503	8-729-606-33	TRANSISTOR 2SC2603F
Q504	8-729-180-93	TRANSISTOR 2SD809
Q505	8-729-117-54	TRANSISTOR 2SA1175
Q506	8-729-117-54	TRANSISTOR 2SA1175
Q507	8-729-173-13	TRANSISTOR 2SB731
Q508	8-729-201-56	TRANSISTOR 2SK246-GR2
Q509	8-729-606-33	TRANSISTOR 2SC2603F
Q510	8-729-900-80	TRANSISTOR DTC114ES
Q511	8-729-364-72	TRANSISTOR 2SB647
Q512	8-729-110-68	TRANSISTOR 2SA1409-L
Q513	8-729-107-25	TRANSISTOR 2SD1585-L
Q514	8-729-900-74	TRANSISTOR DTC143TS
Q515	8-729-606-33	TRANSISTOR 2SC2603F
Q516	8-729-180-93	TRANSISTOR 2SD809
Q518	8-729-107-88	TRANSISTOR 2SC3622A-L
Q519	8-729-900-61	TRANSISTOR DTA114ES
Q520	8-729-900-80	TRANSISTOR DTC114ES
Q521	8-729-606-33	TRANSISTOR 2SC2603F
Q522	8-729-900-61	TRANSISTOR DTA114ES
Q523	8-729-900-61	TRANSISTOR DTA114ES
Q525	8-729-900-61	TRANSISTOR DTA114ES
Q526	8-729-801-83	TRANSISTOR 2SB1013
Q527	8-729-800-83	TRANSISTOR 2SB808
Q528	8-729-177-44	TRANSISTOR 2SD774-5
Q529	8-729-801-83	TRANSISTOR 2SB1013
Q530	8-729-801-83	TRANSISTOR 2SB1013
Q531	8-729-801-93	TRANSISTOR 2SD1387
Q532	8-729-801-93	TRANSISTOR 2SD1387
Q533	8-729-801-83	TRANSISTOR 2SB1013
Q534	8-729-900-61	TRANSISTOR DTA114ES
Q535	8-729-900-61	TRANSISTOR DTA114ES
Q536	8-729-900-61	TRANSISTOR DTA114ES
Q537	8-729-900-61	TRANSISTOR DTC114ES

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

ELECTRICAL PARTS

Ref.No.	Part No.	Description
Q538	8-729-107-88	TRANSISTOR 2SC3622A-L
Q539	8-729-900-80	TRANSISTOR DTC114ES
Q540	8-729-900-80	TRANSISTOR DTC114ES
Q541	8-729-900-61	TRANSISTOR DTA114ES
Q542	8-729-180-93	TRANSISTOR 2SD809
Q543	8-729-900-83	TRANSISTOR DTC114ES
Q701	8-729-900-63	TRANSISTOR DTA124ES
Q702	8-729-900-63	TRANSISTOR DTA124ES
Q703	8-729-900-63	TRANSISTOR DTA124ES
Q704	8-729-900-63	TRANSISTOR DTA124ES
Q705	8-729-900-63	TRANSISTOR DTA124ES
Q706	8-729-900-63	TRANSISTOR DTA124ES
Q707	8-729-900-63	TRANSISTOR DTA124ES
Q708	8-729-900-63	TRANSISTOR DTA124ES
Q709	8-729-900-63	TRANSISTOR DTA124ES
Q710	8-729-900-63	TRANSISTOR DTA124ES
Q712	8-729-900-63	TRANSISTOR DTA124ES
Q713	8-729-900-63	TRANSISTOR DTA124ES
Q714	8-729-900-63	TRANSISTOR DTA124ES
Q730	8-729-900-63	TRANSISTOR DTC124ES
Q1002	1-807-509-11	PHOTO SENSOR
Q1003	1-807-509-11	PHOTO SENSOR
R001	1-247-240-00	CARBON 1K 5% 1/2W
R101	1-249-460-11	CARBON 15K 5% 1/4W
R102	1-247-698-11	CARBON 68 5% 1/4W
R103	1-246-524-00	CARBON 130K 5% 1/4W
R104	1-247-148-00	CARBON 5.1K 5% 1/4W
R105	1-247-859-00	CARBON 15K 5% 1/6W
R106	1-247-717-11	CARBON 2.2K 5% 1/4W
R107	1-247-718-11	CARBON 2.7K 5% 1/4W
R108	1-247-887-00	CARBON 220K 5% 1/6W
R109	1-249-429-11	CARBON 10K 5% 1/6W
R110	1-249-429-11	CARBON 10K 5% 1/6W
R111	1-249-441-11	CARBON 100K 5% 1/6W
R112	1-247-719-11	CARBON 3.3K 5% 1/4W
R113	1-247-151-00	CARBON 6.8K 5% 1/4W
R114	1-246-488-00	CARBON 4.3K 5% 1/4W
R115	1-247-140-00	CARBON 2.4K 5% 1/4W
R116	1-247-122-00	CARBON 430 5% 1/4W
R117	1-247-851-00	CARBON 6.8K 5% 1/6W
R118	1-249-415-11	CARBON 680 5% 1/6W
R119	1-247-713-11	CARBON 1K 5% 1/4W
R120	1-247-725-11	CARBON 10K 5% 1/4W
R121	1-249-465-11	CARBON 47K 5% 1/4W
R122	1-249-429-11	CARBON 10K 5% 1/6W
R124	1-249-433-11	CARBON 22K 5% 1/6W
R125	1-247-725-11	CARBON 10K 5% 1/4W
R126	1-247-725-11	CARBON 10K 5% 1/4W
R127	1-249-421-11	CARBON 2.2K 5% 1/6W
R128	1-249-469-11	CARBON 100K 5% 1/4W
R129	1-247-151-00	CARBON 6.8K 5% 1/4W
R130	1-247-169-00	CARBON 39K 5% 1/4W
R131	1-249-467-11	CARBON 68K 5% 1/4W
R132	1-247-151-00	CARBON 6.8K 5% 1/4W
R133	1-247-704-11	CARBON 220 5% 1/4W
R134	1-247-153-00	CARBON 8.2K 5% 1/4W
R135	1-247-163-00	CARBON 22K 5% 1/4W
R136	1-247-148-00	CARBON 5.1K 5% 1/4W

ELECTRICAL PARTS

Ref.No.	Part No.	Description
R138	1-247-167-00	CARBON 33K 5% 1/4W
R139	1-247-145-00	CARBON 3.9K 5% 1/4W
R140	1-249-429-11	CARBON 10K 5% 1/6W
R141	1-249-429-11	CARBON 10K 5% 1/6W
R142	1-249-429-11	CARBON 10K 5% 1/6W
R143	1-249-425-11	CARBON 4.7K 5% 1/6W
R144	1-249-432-11	CARBON 18K 5% 1/6W
R145	1-247-883-00	CARBON 150K 5% 1/6W
R146	1-249-433-11	CARBON 22K 5% 1/6W
R148	1-249-421-11	CARBON 2.2K 5% 1/6W
R149	1-247-862-00	CARBON 20K 5% 1/6W
R150	1-247-704-11	CARBON 220 5% 1/4W
R151	1-247-167-00	CARBON 33K 5% 1/4W
R152	1-247-713-11	CARBON 1K 5% 1/4W
R153	1-247-717-11	CARBON 2.2K 5% 1/4W
R154	1-249-421-11	CARBON 2.2K 5% 1/6W
R155	1-249-441-11	CARBON 100K 5% 1/6W
R156	1-249-417-11	CARBON 1K 5% 1/6W
R157	1-249-429-11	CARBON 10K 5% 1/6W
R158	1-249-433-11	CARBON 22K 5% 1/6W
R159	1-247-845-00	CARBON 3.9K 5% 1/6W
R160	1-249-429-11	CARBON 10K 5% 1/6W
R162	1-247-713-11	CARBON 1K 5% 1/4W
R163	1-249-433-11	CARBON 22K 5% 1/6W
R164	1-249-433-11	CARBON 22K 5% 1/6W
R165	1-247-813-00	CARBON 180 5% 1/6W
R166	1-247-869-00	CARBON 39K 5% 1/6W
R167	1-249-417-11	CARBON 1K 5% 1/6W
R168	1-249-429-11	CARBON 10K 5% 1/6W
R169	1-249-429-11	CARBON 10K 5% 1/6W
R170	1-249-465-11	CARBON 47K 5% 1/4W
R301	1-247-704-11	CARBON 220 5% 1/4W
R302	1-247-704-11	CARBON 220 5% 1/4W
R303	1-249-433-11	CARBON 22K 5% 1/6W
R304	1-215-469-00	METAL 100K 1% 1/6W
R305	1-249-429-11	CARBON 10K 5% 1/6W
R306	1-247-859-00	CARBON 15K 5% 1/6W
R307	1-249-421-11	CARBON 2.2K 5% 1/6W
R308	1-249-405-11	CARBON 100 5% 1/6W
R309	1-249-441-11	CARBON 100K 5% 1/6W
R312	1-249-433-11	CARBON 22K 5% 1/6W
R313	1-249-433-11	CARBON 22K 5% 1/6W
R314	1-249-441-11	CARBON 100K 5% 1/6W
R315	1-249-429-11	CARBON 10K 5% 1/6W
R316	1-249-429-11	CARBON 10K 5% 1/6W
R317	1-249-441-11	CARBON 100K 5% 1/6W
R318	1-249-419-11	CARBON 1.5K 5% 1/6W
R319	1-249-437-11	CARBON 47K 5% 1/6W
R320	1-247-823-00	CARBON 470 5% 1/6W
R321	1-247-819-00	CARBON 330 5% 1/6W
R322	1-249-432-11	CARBON 18K 5% 1/6W
R323	1-247-791-00	CARBON 22 5% 1/6W
R324	1-249-432-11	CARBON 18K 5% 1/6W
R325	1-249-429-11	CARBON 10K 5% 1/6W
R326	1-249-429-11	CARBON 10K 5% 1/6W
R327	1-249-425-11	CARBON 4.7K 5% 1/6W
R328	1-249-429-11	CARBON 10K 5% 1/6W

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
R329	1-249-429-11	CARBON	10K	5%	1/6W
R330	1-249-425-11	CARBON	4.7K	5%	1/6W
R331	1-249-432-11	CARBON	18K	5%	1/6W
R332	1-249-441-11	CARBON	100K	5%	1/6W
R333	1-249-429-11	CARBON	10K	5%	1/6W
R334	1-247-869-00	CARBON	39K	5%	1/6W
R335	1-247-869-00	CARBON	39K	5%	1/6W
R336 ⚠	1-212-853-00	FUSIBLE	6.8	5%	1/4W F
R337	1-249-405-11	CARBON	100	5%	1/6W
R338	1-249-425-11	CARBON	4.7K	5%	1/6W
R339	1-249-433-11	CARBON	22K	5%	1/6W
R340	1-249-433-11	CARBON	22K	5%	1/6W
R341	1-249-417-11	CARBON	1K	5%	1/6W
R342	1-249-429-11	CARBON	10K	5%	1/6W
R343	1-249-417-11	CARBON	1K	5%	1/6W
R346	1-247-717-11	CARBON	2.2K	5%	1/4W
R347	1-249-429-11	CARBON	10K	5%	1/6W
R503	1-214-713-00	METAL	220	1%	1/4W
R504	1-214-731-00	METAL	1.2K	1%	1/4W
R505	1-214-723-00	METAL	560	1%	1/4W
R506	1-249-429-11	CARBON	10K	5%	1/6W
R507	1-214-721-00	METAL	470	1%	1/4W
R508	1-249-433-11	CARBON	22K	5%	1/6W
R510	1-249-433-11	CARBON	22K	5%	1/6W
R511	1-214-747-00	METAL	5.6K	1%	1/4W
R512	1-214-755-00	METAL	12K	1%	1/4W
R513	1-247-163-00	CARBON	22K	5%	1/4W
R514	1-247-721-11	CARBON	4.7K	5%	1/4W
R515	1-247-849-00	CARBON	5.6K	5%	1/6W
R516	1-249-417-11	CARBON	1K	5%	1/6W
R517	1-247-717-11	CARBON	2.2K	5%	1/4W
R518	1-247-240-00	CARBON	1K	5%	1/2W
R519	1-249-405-11	CARBON	100	5%	1/6W
R520	1-249-432-11	CARBON	18K	5%	1/6W
R521	1-247-857-00	CARBON	12K	5%	1/6W
R522	1-247-783-00	CARBON	10	5%	1/6W
R523	1-249-433-11	CARBON	22K	5%	1/6W
R524	1-247-903-00	CARBON	1M	5%	1/6W
R525	1-249-422-11	CARBON	2.7K	5%	1/6W
R526	1-249-441-11	CARBON	100K	5%	1/6W
R528	1-249-429-11	CARBON	10K	5%	1/6W
R529	1-247-903-00	CARBON	1M	5%	1/6W
R530	1-249-429-11	CARBON	10K	5%	1/6W
R531	1-249-417-11	CARBON	1K	5%	1/6W
R532	1-249-437-11	CARBON	47K	5%	1/6W
R533	1-249-433-11	CARBON	22K	5%	1/6W
R534	1-249-433-11	CARBON	22K	5%	1/6W
R535	1-249-437-11	CARBON	47K	5%	1/6W
R536	1-249-437-11	CARBON	47K	5%	1/6W
R537	1-247-857-00	CARBON	12K	5%	1/6W
R538	1-249-425-11	CARBON	4.7K	5%	1/6W
R539	1-247-857-00	CARBON	12K	5%	1/6W
R540	1-247-708-11	CARBON	470	5%	1/4W
R541	1-249-433-11	CARBON	22K	5%	1/6W
R542	1-249-433-11	CARBON	22K	5%	1/6W
R543	1-247-808-00	CARBON	110	5%	1/6W
R544	1-249-425-11	CARBON	4.7K	5%	1/6W

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
R551	1-247-823-00	CARBON	470	5%	1/6W
R552	1-247-823-00	CARBON	470	5%	1/6W
R553	1-247-823-00	CARBON	470	5%	1/6W
R554	1-247-823-00	CARBON	470	5%	1/6W
R555	1-247-823-00	CARBON	470	5%	1/6W
R556	1-247-823-00	CARBON	470	5%	1/6W
R557	1-247-823-00	CARBON	470	5%	1/6W
R558	1-247-823-00	CARBON	470	5%	1/6W
R559	1-247-823-00	CARBON	470	5%	1/6W
R560	1-247-823-00	CARBON	470	5%	1/6W
R561	1-249-433-11	CARBON	22K	5%	1/6W
R562	1-249-433-11	CARBON	22K	5%	1/6W
R563	1-249-433-11	CARBON	22K	5%	1/6W
R564	1-249-433-11	CARBON	22K	5%	1/6W
R565	1-249-433-11	CARBON	22K	5%	1/6W
R566	1-249-433-11	CARBON	22K	5%	1/6W
R567	1-249-433-11	CARBON	22K	5%	1/6W
R568	1-249-433-11	CARBON	22K	5%	1/6W
R569	1-249-433-11	CARBON	22K	5%	1/6W
R570	1-249-433-11	CARBON	22K	5%	1/6W
R571	1-249-433-11	CARBON	22K	5%	1/6W
R572	1-249-433-11	CARBON	22K	5%	1/6W
R578	1-247-859-00	CARBON	15K	5%	1/6W
R579	1-249-425-11	CARBON	4.7K	5%	1/6W
R580	1-247-857-00	CARBON	12K	5%	1/6W
R581	1-247-862-00	CARBON	20K	5%	1/6W
R582	1-249-435-11	CARBON	33K	5%	1/6W
R583	1-249-435-11	CARBON	33K	5%	1/6W
R584	1-247-887-00	CARBON	220K	5%	1/6W
R585	1-247-887-00	CARBON	220K	5%	1/6W
R586	1-247-813-00	CARBON	180	5%	1/6W
R587	1-247-813-00	CARBON	180	5%	1/6W
R588	1-247-813-00	CARBON	180	5%	1/6W
R589	1-247-813-00	CARBON	180	5%	1/6W
R590	1-247-843-00	CARBON	3.3K	5%	1/6W
R591	1-247-843-00	CARBON	3.3K	5%	1/6W
R592	1-249-417-11	CARBON	1K	5%	1/6W
R593	1-249-415-11	CARBON	680	5%	1/6W
R594	1-249-421-11	CARBON	2.2K	5%	1/6W
R595	1-249-417-11	CARBON	1K	5%	1/6W
R596	1-249-417-11	CARBON	1K	5%	1/6W
R597	1-249-417-11	CARBON	1K	5%	1/6W
R598	1-249-417-11	CARBON	1K	5%	1/6W
R599	1-247-833-00	CARBON	1.2K	5%	1/6W
R600	1-249-405-11	CARBON	100	5%	1/6W
R601	1-247-823-00	CARBON	470	5%	1/6W
R602	1-249-425-11	CARBON	4.7K	5%	1/6W
R604	1-249-435-11	CARBON	33K	5%	1/6W
R605	1-249-433-11	CARBON	22K	5%	1/6W
R606	1-249-441-11	CARBON	100K	5%	1/6W
R607	1-247-815-00	CARBON	220	5%	1/6W
R608	1-247-815-00	CARBON	220	5%	1/6W
R715	1-249-429-11	CARBON	10K	5%	1/6W
R716	1-249-425-11	CARBON	4.7K	5%	1/6W
R730	1-215-452-00	METAL	20K	1%	1/6W
R731	1-215-452-00	METAL	20K	1%	1/6W
R732	1-215-452-00	METAL	20K	1%	1/6W

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ELECTRICAL PARTS

Ref.No.	Part No.	Description			
R733	1-215-452-00	METAL	20K	1%	1/6W
R734	1-215-452-00	METAL	20K	1%	1/6W
R735	1-215-452-00	METAL	20K	1%	1/6W
R736	1-215-452-00	METAL	20K	1%	1/6W
R737	1-215-445-00	METAL	10K	1%	1/6W
R738	1-215-445-00	METAL	10K	1%	1/6W
R739	1-215-445-00	METAL	10K	1%	1/6W
R740	1-215-445-00	METAL	10K	1%	1/6W
R741	1-215-445-00	METAL	10K	1%	1/6W
R742	1-215-445-00	METAL	10K	1%	1/6W
R743	1-215-460-00	METAL	43K	1%	1/6W
R744	1-215-425-00	METAL	1.5K	1%	1/6W
R745	1-249-425-11	CARBON	4.7K	5%	1/6W
R746	1-249-425-11	CARBON	4.7K	5%	1/6W
R750	1-249-433-11	CARBON	22K	5%	1/6W
R762	1-247-712-11	CARBON	820	5%	1/4W
R771	1-249-417-11	CARBON	1K	5%	1/6W
R772	1-249-433-11	CARBON	22K	5%	1/6W
R773	1-249-417-11	CARBON	1K	5%	1/6W
R774	1-249-433-11	CARBON	22K	5%	1/6W
RV101	1-228-994-00	RES, ADJ, CARBON 10K			
RV102	1-237-274-11	RES, VAR, CARBON 10K/10K			
RV103	1-230-632-11	RES, ADJ, CARBON 33K			
RV104	1-228-995-00	RES, ADJ, CARBON 22K			
RV105	1-228-996-00	RES, ADJ, CARBON 47K			
RV106	1-228-995-00	RES, ADJ, CARBON 22K			
RV201	1-228-994-00	RES, ADJ, CARBON 10K			
RV202	1-237-274-11	RES, VAR, CARBON 10K/10K			
RV203	1-230-632-11	RES, ADJ, CARBON 33K			
RV204	1-228-995-00	RES, ADJ, CARBON 22K			
RV205	1-228-996-00	RES, ADJ, CARBON 47K			
RV206	1-228-995-00	RES, ADJ, CARBON 22K			
RV301	1-226-754-31	RES, VAR 20K/20K			
RV302	1-230-313-00	RES, VAR, CARBON 20K/20K			
RV501	1-228-995-00	RES, ADJ, CARBON 22K			
RY301	1-515-547-11	RELAY			
S301	1-570-103-21	SWITCH, PUSH (1 KEY)(POWER)			
S302	1-570-532-11	SWITCH, PUSH (5 KEY)(DOLBY NR)			
S303	1-554-208-00	SWITCH, SLIDE (TIMER)			
S501	1-554-980-11	SWITCH, KEY BOARD (STOP)			
S502	1-554-980-11	SWITCH, KEY BOARD (REW)			
S503	1-554-980-11	SWITCH, KEY BOARD (FF)			
S504	1-554-980-11	SWITCH, KEY BOARD (FWD)			
S505	1-554-980-11	SWITCH, KEY BOARD (REV)			
S506	1-554-980-11	SWITCH, KEY BOARD (REC)			

ELECTRICAL PARTS

Ref.No.	Part No.	Description
S507	1-554-980-11	SWITCH, KEY BOARD (PAUSE)
S508	1-554-980-11	SWITCH, KEY BOARD (REC MUTE)
S509	1-554-980-11	SWITCH, KEY BOARD (TAPE OPR)
S510	1-554-980-11	SWITCH, KEY BOARD (CAL)
S771	1-554-980-11	SWITCH, KEY BOARD (RESET)
S772	1-554-980-11	SWITCH, KEY BOARD (MEMORY)
S901 ⚠	1-570-307-11	(E)....SWITCH, VOLTAGE CHANGE
S1001	1-570-720-11	SWITCH, PUSH (1 KEY)
S1002	1-570-720-11	SWITCH, PUSH (1 KEY)
S1005	1-570-723-11	SWITCH, PUSH (1 KEY)
S1006	1-570-719-11	SWITCH, LEAF
S1007	1-570-721-11	SWITCH, LEAF
SPK101	1-235-186-00	ENCAPSULATED COMPONENT
SPK201	1-235-186-00	ENCAPSULATED COMPONENT
T101	1-433-316-11	TRANSFORMER, BIAS STEP UP
T201	1-433-316-11	TRANSFORMER, BIAS STEP UP
T301 ⚠	1-448-551-11	(US,Canadian)...TRANSFORMER, POWER
T301 ⚠	1-448-552-11	(AEP,UK).....TRANSFORMER, POWER
T301 ⚠	1-448-553-11	(E).....TRANSFORMER, POWER
T302	1-433-315-11	TRANSFORMER, BIAS OSCILLATION
TP1	*1-560-061-00	PIN, CONNECTOR 3P
X501	1-567-160-00	OSCILLATOR, CERAMIC
X502	1-527-532-00	OSCILLATOR, CERAMIC

ACCESSORY & PACKING MATERIAL

Part No.	Description
1-558-233-11	CORD (WITH CONNECTOR)(SIRCS)4P
1-558-543-11	CORD, CONNECTION
3-318-958-01	CUSHION (LEFT), LOWER
3-318-959-01	CUSHION (RIGHT), LOWER
3-318-960-01	CUSHION (LEFT), UPPER
3-318-961-01	CUSHION (RIGHT), UPPER
3-324-801-41	(US,Canadian)...INDIVIDUAL CARTON
3-324-801-51	(AEP,UK,E).....INDIVIDUAL CARTON
3-701-630-00	BAG, POLYETHYLENE
3-703-450-01	INSTRUCTION
3-703-680-00	LABEL, CAUTION, SUB, NEW UL
3-765-223-11	(AEP,UK,E).....MANUAL, INSTRUCTION
3-765-223-21	(US,Canadian)...MANUAL, INSTRUCTION
3-765-223-31	(Canadian).....MANUAL, INSTRUCTION
3-765-223-41	(AEP).....MANUAL, INSTRUCTION
4-876-352-00	SHEET, PROTECTION

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Sony Corporation

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